

IOWA BIRD LIFE

Spring 1997 Volume 67 Number 2



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FRONT COVER: Clark's Nutcracker near Pony Hollow, Mills County, 20 December 1996. Photo by Thomas H. Kent.

INSIDE BACK COVER: Editorial Staff, Subscription/Membership Information, Instructions to Authors, Officers, Board of Directors, Standing Committees.

BACK COVER: Meeting Dates, Report Deadlines, Birdline, Materials Available.

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THE NESTING ECOLOGY OF THE COOPER'S HAWK IN IOWA

DAVID J. CONRADS

Prior to 1950, the Cooper's Hawk (*Accipiter cooperii*) was a common nesting raptor in Iowa and was found statewide (Anderson 1907, Bailey 1918, DuMont 1933, Roosa and Stravers 1989). However, after 1950, its populations seemed to be greatly reduced. Organochlorine biocides and their residues (Henny and Wight 1972, Hickey and Anderson 1968, Pattee et al. 1985, Snyder et al. 1973) along with the elimination of more than 40% of Iowa's woodlands (Thomson and Herel 1981) probably contributed to this decline. It was originally listed as a threatened species in Iowa (Roosa 1977), but later listed as an endangered species by the Iowa Department of Natural Resources. Only seven nests were documented from 1950 through 1984 (Roosa and Stravers 1989).

The status of the Cooper's Hawk was also of concern in adjacent states. In 1989 the Cooper's Hawk was listed as "endangered" in Illinois (State of Illinois 1989) and Missouri (Wilson 1984), of "special concern" in Nebraska (Clausen et al. 1989), and "sensitive" in South Dakota (Houtcooper et al. 1985); the species was not listed in Minnesota and Wisconsin.

Productivity and nesting success are good indicators of the habitat quality of nesting Cooper's Hawks (Snyder and Snyder 1974). Steenhof (1987) also discussed the importance of identifying these indicators so areas of poor nesting success can be determined. Although several studies have documented productivity and/or nesting success of Cooper's Hawks (e.g., Reynolds and Wight 1978, Janik and Mosher 192), only Craighead and Craighead (1956) and Rosenfield and Anderson (1983) have done so in the Midwest. The former study was completed prior to 1950 and largely predated the major use of DDT while the latter was carried out in mixed deciduous-coniferous forests. No studies have documented Cooper's Hawk productivity in woodlands in agriculture-dominated sections of the Midwest.

The quantification of nest-site habitat variables such as distance of nest from water, slope of nest site, distance of nest tree from forest openings, and percentage of canopy cover has become the method of habitat description for nesting raptors (James and Shugart 1970). The earliest attempts to quantify nest-site habitat characteristics occurred in the late 1970s (Hennessy 1978, Howell et al. 1978, Keran 1978, Bednarz 1979).

The Cooper's Hawk nesting habitat varies throughout its range. In the eastern United States it has nested in deciduous and coniferous forests (Bent 1937, Meng 1951), in the Northwest in coniferous forests (Moore and Henny 1983, Reynolds 1983, Jones 1979), and in the Southwest along wooded rivers and streams (Snyder and Snyder 1974). In Iowa, nests have been most often found in dry, upland, second growth oak-hickory communities (Bailey 1918, Dinsmore et al. 1984). Quantitative studies of Cooper's Hawk nesting habitat have occurred in coniferous forests of the northwestern United States (Moore and Henny 1983), in the deciduous forests of the central Appalachians (Titus and Mosher 1981), and in the mixed deciduous and coniferous forests of Missouri (Kritz 1989).

During the summers of 1988 and 1989, I intensively studied various aspects of the nesting ecology of the Cooper's Hawk in Iowa. The study had three objectives: 1) to determine the status and distribution of this species; 2) to determine its nesting success and productivity; and 3) to describe its habitat at the immediate nest site and

in the surrounding territory. I used information from nests found by others in 1985-1987 along with the nests found in 1988 and 1989.

METHODS

NEST SEARCHING

I relied on two methods for locating active nests. First, I checked historically active nesting areas for current activity. Second, I relied on information from individuals (i.e., birders, falconers, turkey hunters) who had located active Cooper's Hawk nests or had encountered territorial birds. If someone had found some territorial adults I then tried to locate a nest. Nest searching was done from mid-April through leaf-out in early May. Their stick nests are conspicuous at this time, and the adult birds are relatively active, especially in early morning. Once a nest was located I recorded the exact location for later observation. When the leaves come out, the nest is often difficult to locate.

NESTING SUCCESS AND PRODUCTIVITY

Later in the nesting cycle, approximately mid to late June, I revisited the nest site to determine nesting success and productivity. Productivity was defined as the number of fledglings produced per nesting attempt, and a nest was considered successful if at least one bird fledged. A nesting attempt was recorded when a nest was found with an adult incubating eggs. Observations were made from the ground. Tree climbing was kept to a minimum since injury to trees by climbing spikes, along with the stress of drought conditions during the summers of 1988 and 1989 may have caused the death of two nest trees, a white pine (*Pinus strobus*) and a red oak (*Quercus rubra*).

NESTING HABITAT

Nesting habitat sampling was conducted after the nestlings had fledged and were no longer using the immediate nest site. Nesting habitat was quantified at two levels: nesting territory and nest site. Nesting territory habitat was defined as a 200 hectare circular plot (800 meters radius) centered on the nest tree. This is approximately equal to the nesting home range for Cooper's Hawks (Craighead and Craighead 1956). Nest-site habitat was defined as the nest tree and a 0.04 ha circular plot (11.3 m radius) centered on the nest tree. Some nesting territory and all nest-site and nest tree variables were measured and recorded in the field. The remaining nesting territory variables were measured from Agriculture Stabilization and Conservation Service (ASCS) aerial photographs and United States Geological Survey (USGS) topographical maps. Nests located between 1985 and 1989 were used for habitat information. Nesting territory data was recorded at 33 nests and nest-site data at 28 nests.

RESULTS

STATUS AND DISTRIBUTION

Twenty-two nests were located during the 1988 and 1989 breeding seasons. Fifty-one other areas were found to have hawks exhibiting breeding behavior, but nests were not located. Between 1985 and 1989 34 nests were documented in Iowa. Figure

1 shows the counties where Cooper's Hawk nests and territorial birds were documented during those five nesting seasons. I have also included counties with nests found between 1990 and 1996 (Conrads in press), as well as counties with summer birds listed in Iowa Bird Life during that period. Most Cooper's Hawk nests and territorial birds were found in eastern, central, and south-central Iowa but a few were found elsewhere (Fig. 1).

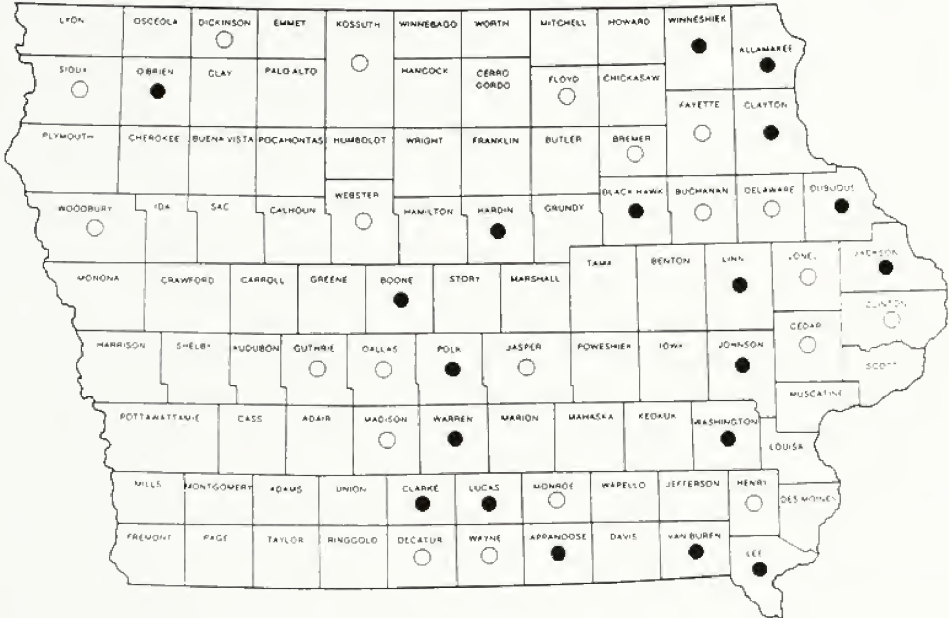


Figure 1. Counties in which Cooper's Hawk nests have been found (●), and counties where Cooper's Hawks have been seen exhibiting breeding behavior or have been seen during the nesting season, but no nest found (○): 1985-1996.

NESTING SUCCESS AND PRODUCTIVITY

Twenty-six of the 34 nests were checked to determine nesting success. Seventeen of these 26 nests produced at least one young (65.4%). The productivity of the nests was 1.85 birds/nest. The productivity for successful nests was 2.82 birds/nest. The probable causes for nest failure for eight of the nine nest failures were human disturbance (2), cattle disturbance (2), raccoon (*Procyon lotor*) predation (1), Great horned Owl (*Bubo virginiana*) predation (1), high winds (1), and lightning strike of nest tree (1). Nesting success was greater on public lands (71.4%, n=21) than on private property (40.0%, n=5).

NESTING HABITAT

Nesting territory, nest site, and nest-tree measurements are summarized in Table 1. Cooper's Hawks tended to nest in areas with a large percentage of upland forest (57.5%), in large contiguous woodlots (155.4 ha), and close to woodland trails (97.8 m). They seemed to pick areas with high canopy density (82.9%) and high understory

cover (65.6%) around the nest site and areas with a high density of overstory and understory trees. The stands typically were dominated by small to medium sized trees, with few large overstory trees.

Table 1. Cooper's Hawk nesting territory and nest-site habitat characteristics.

Variable	No.	Mean \pm SD	Range
Nesting Territory (200 ha circular plot centered on nest tree)			
Percent Forest	33	65.8 \pm 18.7	25.5 - 95.2
Percent Upland Forest	33	57.5 \pm 20.1	25.5 - 94.4
Percent Lowland Forest	33	8.3 \pm 13.2	0.0 - 55.0
Percent Fields and Open Areas	33	30.2 \pm 17.4	4.6 - 60.3
Percent Water	33	4.3 \pm 7.2	0.0 - 25.8
Woodlot Area (ha)	33	155.4 \pm 57.8	40.8 - 200.0
Distance to trail/road (m)	33	97.8 \pm 97.8	6.0 - 390.0
Distance to gravel road (m)	33	441.7 \pm 2210.1	80.0 - 1,040.0
Distance to paved road (m)	33	2102.7 \pm 309.7	175.0 - 7,100.0
Distance to human dwelling (m)	33	643.5 \pm 374.9	150.0 - 1,300.0
Distance to open area >1 acre (m)	33	166.1 \pm 91.4	12.0 - 390.0
Distance to water (m)	33	372.3 \pm 247.6	65.0 - 860.0
Distance to nearest edge (m)	33	60.3 \pm 42.5	6.0 - 155.0
Nest site (0.04 ha circular plot centered on nest tree)			
Degree slope of plot	28	8.7 \pm 4.7	0.0 - 19.0
Percent canopy cover	28	82.9 \pm 7.0	67.5 - 92.5
Percent understory cover	28	65.1 \pm 16.4	32.5 - 95.0
Canopy height (m)	28	19.4 \pm 1.6	16.8 - 22.0
No. of trees with dbh <25 cm	28	5.9 \pm 4.4	0 - 15
No. of trees with dbh 25-50 cm	28	10.4 \pm 5.5	4 - 26
No. of trees with dbh >50 cm	28	0.4 \pm 0.7	0 - 2
No. of species of overstory trees	28	3.9 \pm 1.3	1 - 6
No. of species of understory trees	28	3.9 \pm 1.5	1 - 7
Nest tree			
Nest height (m)	28	14.6 \pm 2.4	10.2 - 20.5
Nest tree height (m)	28	20.0 \pm 2.0	16.5 - 24.0
Percent height of nest in tree	28	72.8 \pm 9.5	52.3 - 87.5
Nest tree dbh (cm)	28	35.0 \pm 10.8	23.9 - 44.2
No. of supporting branches	28	3.3 \pm 0.6	2 - 5

All of the Cooper's Hawk nest sites were within oak-hickory forest communities; the three nests found in conifers were in stands that had been planted within oak-hickory forests. Oaks (*Quercus* spp.) comprised 21 of 31 nest trees. Nests were constructed in eight species of trees: red oak (13), white oak (*Q. alba*) (8), shagbark

hickory (*Carya ovata*) (2), black cherry (*Prunus serotina*) (2), bigtooth aspen (*Populus grandidentata*) (2), white pine (2), black walnut (*Juglans nigra*) (1), and European larch (*Larix decidua*) (1).

Most Cooper's Hawk nests (85.7%) were located in the main crotch of the nest tree; the rest were in secondary or tertiary crotches. The mean number of branches supporting the nest was 3.3. Nearly all the nest trees were either in flat upland forests or on mid or upper portions of north to east facing slopes. No nests were found in lowlands (Fig. 2). The nest tree height averaged 20 meters, and the nest height was nearly three fourths of the tree height (14.6 m). The mean tree diameter at breast height (dbh) was 35.0 cm.

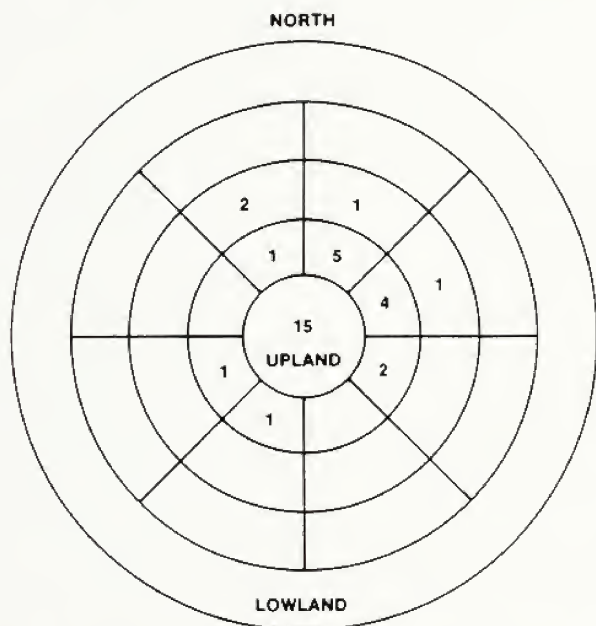


Figure 2. Directional exposure and relationship of Cooper's Hawk nest sites to ridge. Number of nests and position relative to ridge indicated. The three concentric rings between the upland and lowland represent the upper, middle, and lower thirds of slopes.

DISCUSSION

DISTRIBUTION

Based on the number of nests found and sightings of birds showing territorial behavior, the Cooper's Hawk was recently taken off the state's endangered species list (State of Iowa 1994.). Since April 1990, 31 more nests have been documented (Conrads, in press) and numerous birds have been seen displaying breeding behavior. With the protection of upland, oak-hickory forests, this species should continue to successfully breed in Iowa.

NESTING SUCCESS AND PRODUCTIVITY

The 65.4% nesting success of Cooper's Hawks in Iowa is similar to that found in Wisconsin, (68.6%, $n = 83$) (Rosenfield and Anderson 1983), and Oregon, (69%, $n = 29$) (Reynolds and Wight 1978). The 1.85 fledglings per nesting attempt was close to what Craighead and Craighead (1956) found in Michigan (2.15, $n = 13$) and Janik and Mosher (1982) found in Maryland (2.0, $n = 11$). Success and productivity were much greater on public lands than private lands; cattle disturbance was suspected in two of the nest failures on private land. These nests were deserted after cattle were released into the woodlots where the nests were located.

NESTING HABITAT

Trees used by Cooper's Hawks nesting in Iowa were more often deciduous than those found in Wisconsin and Missouri. In Wisconsin 44.4% of the nest trees were conifer (Rosenfield and Anderson 1983), while in Missouri 76.7% of the nests were in conifers (Kritz 1989). The nests in the mixed conifer plantations of Yellow River State Forest were the only exception to deciduous tree nesting in Iowa. Two nests were located in red oaks that were within 100 meters of pine plantings. This suggests a preference for deciduous trees, however, perhaps those pines were not large enough to support a nest. As these conifer plantations mature, Cooper's Hawks may be attracted to them for nesting. In Missouri the pines used by Cooper's Hawks for nesting were in plantations (Kritz 1989).

In this study all of the nests were located in upland forest or high on slopes. This is similar to what has been described for the eastern United States (Palmer 1988). There was also strong evidence that when nesting on a slope, Cooper's Hawks prefer north-to-east facing slopes. This was also found in the western coniferous forests (Moore and Henny 1983). It was suggested there that accipiters are intolerant of excessive heat and chose cooler sites for nesting. In Missouri, Kritz (1989) noted a tendency towards nesting on north slopes, but it was statistically inconclusive. In Iowa, especially in northeastern Iowa, forests appear to be better developed on the north-to-east facing slopes, because it is wetter and cooler.

The nesting territory variables sampled suggested that rural nesting Cooper's Hawks required relatively large tracts of forest for nesting. Most of these woods were upland. This may be explained by their secretive behavior in hunting, i.e., they require cover for surprising their prey, mainly birds.

Most Cooper's Hawk nests were relatively close to some sort of forest opening. This was probably for nest access. The Cooper's Hawk nested close to woodland paths, which provide a forest opening with a minimal amount of canopy opening. On several occasions I observed adult hawks as they used these paths for nest access as well as for a perch to capture other birds using the opening as a flyway. Some nests were located in areas of moderate human activity which did not seem to affect the nesting success of the birds. In general, nests were far from a paved road, suggesting the rural nature of their nesting habitat.

The nest-site measurements showed that the Cooper's Hawks nested in areas with dense understory and overstory cover. The overstory cover provided shade and decreases accessibility by avian predators, such as the Great Horned Owl. The understory cover chosen was unlike that found in other parts of its range. Perhaps it provided cover from tree-climbing predators, such as the raccoon, but there is no evidence supporting this idea. Moore and Henny (1983) suggested that the selection

of nesting habitat could be influenced by predation. The areas were characterized by many medium and small trees with few large trees. Dense forested areas are typically used by Cooper's Hawks throughout their range (Palmer 1988). Cooper's Hawk nest trees were also about the same height as the surrounding trees, indicating an even aged stand.

Cooper's Hawks throughout their range nest in the main crotch of the tree. Nests found on secondary crotches were late nests. Main crotch nests were usually built before the trees leaf out and provided cover for the hawks, while the secondary crotch nests were built after leaf-out. This behavior suggested that, once leaf-out has occurred, the main crotch was no longer needed for cover.

MANAGEMENT RECOMMENDATIONS

Private land owners should be strongly urged to keep cattle out of potential nesting woodlots at all times of the year, especially during sensitive times of the nesting cycle (nest building through incubation) since this appeared to cause nest desertion. Cattle presence out of the nesting season may damage the potentially critical understory structure. Current management practices of public woodlands have not been found to disrupt Cooper's Hawk nesting. Two natural causes of nest failure, predators and weather, have been reported throughout its range (Meng 1951, Palmer 1988) and do not seem to be a significant limiting factor in Iowa. The preservation of upland forest habitat is the most critical factor for ensuring successful nesting of Cooper's Hawks in Iowa.

CONCLUSIONS

The number of Cooper's Hawks found nesting in Iowa has increased. Nests on public land had a greater success rate than those on private land. Cattle disturbance probably caused failures at two nest sites and grazing of woodlots should be strongly discouraged. The nesting success and productivity rates were similar to those in other studies. Continued intensive nest searching may establish more clearly the status of Cooper's Hawk nesting in Iowa and will also provide information on nest site fidelity.

Cooper's Hawks chose large woodlots for nesting. They nested in upland oak-hickory communities on or near ridgetops. If nesting on a slope, the nest was usually north to east facing. The canopy and understory cover was quite dense near the nest tree.

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LITERATURE CITED

- Anderson, R. M. 1907. The birds of Iowa. *Proceedings of the Davenport Academy of Science* 11:125-417.
- Bailey, B. H. 1918. The raptorial birds of Iowa. *Iowa Geological Survey Bulletin* no. 6 238pp.
- Bednarz, J. C. 1979. *I. Productivity, nest sites, and habitat of Red-shouldered Hawks and Red-tailed Hawks in Iowa. II. Status, habitat utilization, and management of Red-shouldered Hawks in Iowa*. M. S. thesis, Iowa State University, Ames.
- Bent, A. C. 1937. Life histories of North American birds of prey. Part 1. *U. S. National Museum Bulletin* 167. 409pp.
- Clausen, M., M. Fritz, and G. Steinauer. 1989. *Two year program report*. Nebraska Natural Heritage Program, Lincoln. Unpublished report. 154 pp.
- Conrads, D. J. Nesting status of the Cooper's Hawk in Iowa: 1988-1996. *Journal of the Iowa Academy of Science*, in press.
- Craighead, J. J., and F. C. Craighead. 1956. *Hawks, Owls and Wildlife*. Stackpole Co., Harrisburg, PA. 443 pp.
- Dinsmore, J. J., T. H. Kent, D. Koenig, P. C. Petersen, and D. M. Roosa. 1984. *Iowa Birds*. Iowa State University Press, Ames. 356pp.
- DuMont, P.A. 1933. A revised list of the birds of Iowa. *University of Iowa Studies of Natural History* 15(5):1-171.
- Fuller, M. R., and J. A. Mosher. 1987. Raptor survey techniques. Pp. 37-65 in B. A. Giron Pendleton, B. A. Millsap, K. W. Cline, D. M. Bird (eds.). *Raptor Management Techniques Manual*. National Wildlife Federation, Washington, D.C.
- Hennessy, S. P. 1978. *Ecological relationships of accipiters in northern Utah - with special emphasis on the effects of human disturbance*. M. S. thesis, Utah State University, Logan.
- Henny, C. J., and H. M. Wight. 1972. Population ecology and environmental pollution: Red-tailed and Cooper's hawks. Pp. 229-250 in C. J. Henny and H. M. Wight, eds. *Population ecology of migratory birds*. U. S. Fish and Wildlife Service, Wildlife Research Report 2. 278 pp.
- Hickey, J. J., and D. W. Anderson. 1968. Chlorinated hydrocarbons and eggshell changes in raptorial and fish-eating birds. *Science* 162:271-273.
- Houtcooper, W. C., D. J. Ode, J. A. Pearson, and G. M. Vandell III. 1985. Rare animals and plants of South Dakota. *The Prairie Naturalist* 17:143-165.
- Howell, J., B. Smith, J. B. Holt, Jr., and D. R. Osborne. 1978. Habitat structure and productivity in Red-tailed Hawks. *Bird-Banding* 49:162-171.
- James, F. C., and H. H. Shugart, Jr. 1970. A quantitative method of habitat description. *Audubon Field Notes* 24:727-736.
- Janik, C. A., and J. A. Mosher. 1982. Breeding biology of raptors in the central Appalachians. *Raptor Research* 16:18-24.
- Jones, S. 1979. Habitat management series for unique or endangered species. The accipiters - goshawks, Cooper's Hawks, Sharp-shinned Hawks. *U. S. Bureau of Land Management, Technical Note* 17. 51 p.
- Keran, D. 1978. Nest site selection by the Broad-winged Hawk in north central Minnesota and Wisconsin. *Raptor Research* 12:15-20.
- Kritz, K. J. 1989. *Nesting ecology and nest site habitat of Sharp-shinned and Cooper's hawks in Missouri*. M. S. thesis, University of Missouri, Columbia.
- Meng, H. K. 1951. *The Cooper's Hawk*. Ph. D. dissertation, Cornell University, Ithaca, NY.

- Moore, K. R., and C. J. Henny. 1983. Nest site characteristics of three coexisting accipiter hawks in northeastern Oregon. *Raptor Research* 17:65-76.
- Palmer, R. S. 1988. *Handbook of North American birds*. Volume 4, Diurnal Raptors Part I. Yale University Press, New Haven, CT. 433 pp.
- Pattee, O. H., M. R. Fuller, and T. E. Kaiser. 1985. Environmental contaminants in eastern Cooper's Hawk eggs. *Journal of Wildlife Management* 49: 10401044.
- Reynolds, R. T. 1983. Management of west coniferous forest habitat for nesting accipiter hawks. *U. S. Forest Service General Technical Report* RM-102. 7 pp.
- Reynolds, R. T., and H. M. Wight. 1978. Distribution, density, and productivity of accipiter hawks breeding in Oregon. *Wilson Bulletin* 90:182-196.
- Roosa, D. M. 1977. *Endangered Iowa birds*. Iowa Preserve Board Special Report 4. Iowa Conservation Commission, Des Moines. 25 pp.
- Roosa, D. M., and J. Stravers. 1989. Nesting of raptors uncommon in Iowa: summary and new records. *Journal of the Iowa Academy of Science* 96:41-49.
- Rosenfield, R. N., J. Bielefeldt, and R. K. Anderson. 1983. *Status of the Cooper's Hawk breeding in Wisconsin*. Wisconsin Department of Natural Resources. Unpublished Report, Study No. 208.
- Snyder, H. A., and N. F. R. Snyder. 1974. Increased mortality of Cooper's Hawks accustomed to man. *Condor* 76:215-216.
- Snyder, N. F. R., H. A. Snyder, J. L. Lincer, and R. T. Reynolds. 1973. Organochlorines, heavy metals, and the biology of North American accipiters. *BioScience* 23:300-305.
- State of Illinois. 1989. *Illinois Administrative Code*, Vol. 2, Section Fauna, Title 17, no. 10.10.
- State of Iowa. 1994. Endangered and threatened plant and animal species. *Iowa Administrative Code*, chapter 77, 1-8.
- Steenhof, K. 1987. Assessing raptor reproductive success and productivity. Pp. 157-170 in B. A. Giron Pendleton, B. A. Millsap, K. W. Cline, and D. M. Bird (eds.). *Raptor Management Techniques Manual*. National Wildlife Federation, Washington, D. C.
- Thomson, G. W., and H. G. Hertel. 1981. The forest resources of Iowa in 1980. *Proceedings of the Iowa Academy of Science* 88:2-6.
- Titus, K., and J. A. Mosher. 1981. Nest-site habitat selected by woodland hawks in the central Appalachians. *Auk* 98:270-281.
- Wilson, J. H. 1984. *Rare and endangered species of Missouri*. Missouri Department of Conservation. 171 pp. Jefferson City.

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EASTERN IOWA BIG DAYS

PETER C. PETERSEN

Planning and executing a big day count is probably one of the most challenging birding events. It requires a fine overall knowledge of the habitats in your region, specific nesting sites for the year, careful attention to weather and the pace of migration, and, more importantly, a team which fits well together. The team must possess top skills and a willingness to stick to a fast moving schedule.

Scouting is quite valuable and our team, The East Davenport All Stars (we were all born in and/or live in East Davenport, once a separate town), splits up the counties for individual scouting. I usually work west in Muscatine and Louisa counties, Brian Blevins covers Scott County, and Don Moeller does Clinton County. We always go with the big day on a weekday since the parks are less crowded and no other counts conflict. Several months in advance of the count, we pick two or three days to keep open, usually between 7 and 13 May. This is narrowed down as the date approaches, and the timing of migration becomes apparent. We look for a time when most warblers should be in, but not all. You can lose ducks, shorebirds, and gulls if you wait for the latest passerines to arrive.

Our start time, usually 2:30 a.m. (CDT), is early enough to work for owls, rails, woodcock, and goatsuckers and still reach our prime marsh location before dawn. Cone Marsh was our start point for daylight until 1996 when, due to the lack of good marsh habitat at Cone Marsh, we switched to Green Island. Eastern Screech-Owl is usually staked out at a nest; the larger owls are never a problem in this area. Wild Turkeys often call at night, and American Woodcock can be found at any good nesting site. Being at a marsh at dawn gives the group a chance for many species. We keep one list where the birds are numbered in the sequence found, and a second with counts and estimates of individuals seen.

By sunrise a list of 60 species means you are on track. We expect to have 100 species when we leave our marsh area. The ponds, sedge areas, and wooded borders always contribute significantly. Our 1996 plan saw the sequence of Goose Lake (before dawn), Green Island, Sabula, Gomer's Lake, Bulger's Hollow, Eagle Point Park (Clinton), Princeton Marsh, Lock 14, Seven-Cities Sod Farm, Wildcat Den State Park, Cone Marsh, Klum Lake, Mark Twain National Wildlife Refuge, and Big Sand Mound Nature Preserve. We eliminated Credit Island as we were strong on woodland migrants by that time. Having done the county count in Louisa County just two days previously, we found several species had stayed in the same location and were easily relocated. We were confident enough on Chuck-will's-widow that we went after it last, and it became species number 204 for the day. Our goal of 200 was finally realized.

The table summarizes our 1990s big days. We strive for a good count for a group of species but do not target and spend a lot of time on finding any one species. As an indication of the potential for our count area, if you add the maximum number found in any year for each group you get 222 species, whereas adding all species seen in the 1990s gives a total of 242 species.

Some general tips for big days: don't fall behind your schedule; if a bird does not "show" after a good check of the best spot, move along. Stay alert at all times; once all three of us saw a Marbled Godwit in flight from a highway at 65 mph. Don't spend too long trying to have everyone see a fly-over; if it is gone, give up and you may well find it later. Use a car that can cover the entire route without needing gas

and that offers a comfortable ride. Have a tape of all species along and use it like a field guide. Three observers are better than four, one fewer to see or hear each species.

Table 1. Count statistics for Eastern Iowa Big Day Counts, 1990-96.

	Year						
	1990	1991	1992	1993	1994	1995	1996
date	8	8	7	11	10	11	13
weather	most clear	lt. rain	clear	occ. cldy.	clear	occ. cldy.	pt. cldy.
temp	61-81	50-69	35-74	62-78	39-74	51-63	36-62
wind direction	sw	e-w	sw	nw	nw-w	nw	nw
wind speed	0-20	5-8	5-10	5-8	0-12	5-10	5-18
start/end	2-8	1:30-7:30	1:30-8:30	2-9	1:30-8	1:40-7:40	1:40-7:40
miles-car	270	308	362	350	258	275	300
species	173	182	195	186	183	190	204
loons/grebes	1	1	2	2	1	2	3
herons/pelicans	6	6	6	8	6	5	6
waterfowl	13	14	19	15	12	19	23
hawks	8	7	9	8	7	11	8
gallinaceous	2	3	4	3	3	4	3
rails, cranes	5	5	5	7	3	5	5
shorebirds	17	15	16	7	20	10	18
gulls	3	3	3	3	3	3	4
terns	3	4	3	3	4	4	4
owls	3	3	3	3	3	4	3
goatsuckers	2	3	2	3	3	3	3
woodpeckers	6	6	7	6	7	7	6
flycatchers	7	6	9	7	8	8	9
swallows	5	6	6	6	6	6	6
wrens	4	5	5	5	5	4	5
thrushes	6	6	7	6	6	7	7
vireos	6	7	6	7	5	6	6
warblers	26	28	28	32	29	29	27
cardinalids/ sparrows	16	16	18	17	16	17	19
icterids	9	9	9	9	9	9	9
finches	3	4	4	4	2	2	4
all others	22	26	24	25	25	25	26

These suggestions can be applied to county-sized spring bird counts. Last year Brian Blevins and I had what was the fourth best one day list for Iowa in Louisa County with 187. Our day list was 190 as we had three more species in our Muscatine County areas. Finally I thank Brian Blevins and Don Moeller for many days of good companionship and great birding.

235 McClellan Blvd., Davenport, IA 52803

CHRISTMAS BIRD COUNT 1995-96

STEPHEN J. DINSMORE

The 1996-97 Christmas Bird Count period was normal in many aspects. Forty-four counts were submitted this year (Fig. 1), up from 39 in 1995-96. These counts recorded a total of 125 species, which is slightly below the average of 130 over the past ten years. A total of 363,000 birds was counted, the lowest number in the last ten years. A severe cold snap covered all of Iowa in the three days preceding the start of the count period. The weather moderated on the first weekend, followed by a cold snap in late December and much milder weather in early January. Fog was a problem on some counts, especially on the first weekend. The top count this year was Keokuk with 78 species, followed by Davenport with 73 (Table 1). No other count exceeded 70 species. Next best were Clinton with 67 and Saylorville with 66. Missouri River counts recorded below-normal species diversity and were led by Omaha and Shenandoah, both with 53. In the Northern Third, Mason City tallied 46, a good count for that part of the state. In the Middle Third, counts centered around the four large reservoirs (Saylorville, Red Rock, Rathbun, and Iowa City) were the lowest in years. Counts in the Southern Third were below normal with Red Rock and Rathbun tied for top honors with 52. Omaha had the most observers with 37 (Table 2). Ames had the most field party hours with 95. Keokuk had the greatest number of individuals (38,997), mostly Common Goldeneye and American Crows (Table 2). This year, the average count had 12 observers in 5 parties and found 47 species. These are all slightly below last year's figures.

REGULAR SPECIES

This year, four Pied-billed Grebes were counted, an average number in recent years (Table 3). Two of these were at the usual heated pool at Cedar Rapids. Great Blue Herons were scarce this year; the 63 reported was the lowest total since 1991-92 and below the 10-year average of 69. Of these, 83% were from counts along the Mississippi River.

Many species of waterfowl were found in below-normal numbers, probably due to the cold snap just prior to the count period. Only 5,760 Snow Geese were tallied, the second lowest total in the last 10 years (only 1995-96 was lower) and far below the 10-year average of 144,000. Conversely, Canada Geese were present in record numbers again this year, easily eclipsing the old record of 33,332 in 1992-93. Of these, 34% were at Jamaica, a haven for this species. Mallard numbers were the highest since 1991-92, but still well below the 10-year average of almost 79,000. Among the other puddle ducks, only Gadwall numbers exceeded the 10-year average. Diving duck numbers were also low. Exceptions were Greater Scaup (7) and Common Goldeneye (9,301), both above their respective 10-year averages of 3 and 3,540. The increase in Greater Scaup numbers may be due to increased observer awareness. Common Merganser numbers were the lowest since 1989-90, and most (69%) were detected on Mississippi River counts.

Raptor numbers were about average this year. The 1,662 Bald Eagles were second only to last year's record count and well above the 10-year average of 1,227. The numbers of Sharp-shinned and Cooper's hawks were slightly above average. Only four Northern Goshawks were reported, the fewest since 1990-91. Numbers of Red-tailed Hawks were average. In contrast to recent years, the only odd falcons were a Merlin and a Prairie Falcon.

Gray Partridge numbers were once again low, continuing their recent decline in Iowa. This year's 87 represented a slight increase from last year, but was still only about half the 10-year average. All were found in the Northern Third on counts with significant snow cover. Ring-necked Pheasant numbers were good this year, well above the 10-year average of 1,626. Snow cover on many counts probably made this species easier to detect. The 1,222 Wild Turkeys is a record count and continues the recent upward trend in numbers of this species. Northern Bobwhite numbers continue to plummet, although numbers improved slightly from last year, but were still well below the 10-year average of 353.

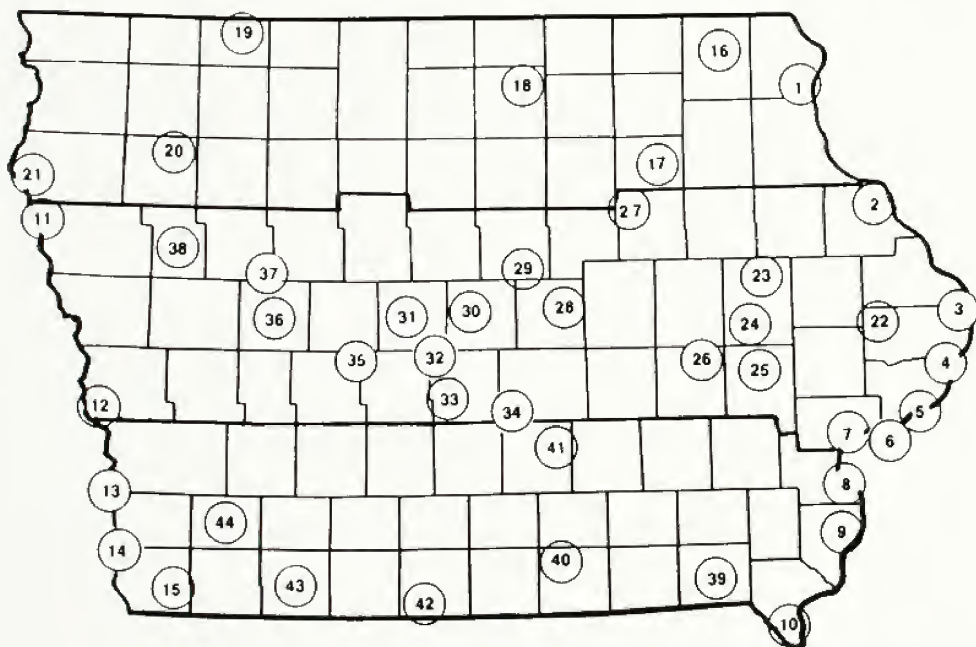


Figure 1. Locations of Iowa Christmas Bird Counts, 1996-97.

Numbers of Killdeer and Common Snipe, species which are usually scarce in cold winters such as this year, were both well below average. As expected, all but one Killdeer and two snipe were found on the Mississippi River counts. Gull numbers were low this year, many being driven south just prior to the count period. Numbers of both Ring-billed and Herring gulls were the fewest since 1989-90 and well below their 10-year averages. An average number of Thayer's (3) and Glaucous (4) gulls was found, but no other unusual species were acceptably documented (see comments below).

Despite the cold winter, Mourning Doves were present in near-record numbers, well above the 10-year average of about 2,000. Numbers of Eastern Screech-Owls and Great Horned Owls were both well below average this year. Screech-Owl numbers are reflective of the owling effort. This year, 84 were found in 109 party-hours of owling, or about 0.8 birds per party hour. Despite a moderate invasion last fall, no Snowy Owls were found this year. Long-eared Owl numbers were well below their 10-year average of 40, and probably reflect a down year for vole populations.

Northern Saw-whet Owl numbers were also down from a 10-year average of seven birds.

Numbers of Belted Kingfishers were average, which is a bit surprising considering the cold fall. Red-headed Woodpeckers were almost absent again this winter due to a poor acorn crop. The statewide total of 168 is far below the 10-year average of 345 and is the lowest total since 1987-88. Only four Yellow-bellied Sapsuckers were found this year. This is the lowest total in the last ten years and well below the 10-year average of 18 birds. Downy Woodpecker numbers were about average, but numbers of Hairy Woodpeckers were down slightly.

Table 1. Site Data for 1996-97 Christmas Bird Counts.

Location	Date	Total Species	Total Birds	Field Obs	Field Pts	Field Hr	Miles Car	Owling Ft	Owling Hr	Owling Mi	Feeder Pt	Temp Hr	Temp L	Snow H	Wind Depth
MISSISSIPPI RIVER															
1. Yellow River For	28 Dec	45	4352	10	6	34	266	13	4	36	1	1	27	32	8 S 0-10
2. Dubuque	28 Dec	46	5849	19	8	42	268	21	0	0	0	0	30	34	6 calm
3. Clinton	23 Dec	67	8006	6	4	36	417	7	3	29	0	0	32	37	0 E 6-15
4. Princeton	30 Dec	60	6005	9	3	33	303	15	6	56	2	4	13	29	0 E 5-12
5. Davenport	22 Dec	73	18695	21	10	68	512	26	10	67	8	16	33	38	0 E 5-15
6. Buffalo	29 Dec	46	4776	6	4	26	238	6	3	26	0	0	19	24	0 S 5-10
7. Muscatine	28 Dec	53	9324	9	4	36	385	8	7	42	6	12	32	38	0 S 5-10
8. Oakville	27 Dec	62	12554	9	4	39	322	12	5	45	0	0	19	32	0 S 5-12
9. Burlington	21 Dec	64	5812	12	4	46	362	38	4	22	6	24	23	35	0 S 10-15
10. Keokuk	23 Dec	78	38997	7	5	44	497	12	1	2	1	3	31	40	0 S 5-10
MISSOURI RIVER															
11. Sioux City	21 Dec	47	6149	18	7	40	385	23	4	3	6	11	15	32	3 NW 5-15
12. DeSoto NWR	22 Dec	42	11490	12	4	32	272	6	2	19	0	0	5	10	0 N 15
13. Omaha, NE	4 Jan	52	6492	37	13	56	393	23	1	1	0	0	20	29	0 NW 10-20
14. Glenwood	3 Jan	35	3658	6	2	12	164	1	2	37	0	0	31	49	0 SE 0-15
15. Shenandoah	4 Jan	53	23347	20	6	44	414	28	2	5	5	34	30	36	0 NW 12-33
NORTHERN THIRD															
16. Decorah	23 Dec	42	3182	12	5	31	252	10	1	6	3	3	26	27	5 NNW 5-15
17. Bremer County	21 Dec	41	2836	7	3	16	314	3	0	0	0	0	29	37	1 SW 5-15
18. Mason City	20 Dec	46	5731	9	5	39	304	8	1	10	6	8	-8	20	3 S 21
19. Spirit Lake	21 Dec	40	4881	13	8	43	381	20	0	0	23	31	6	22	10 NW 5-18
20. Cherokee	21 Dec	40	1993	5	3	19	257	3	2	11	2	7	20	29	4 NW 5-15
21. Westfield	5 Jan	25	552	3	2	14	138	7	0	0	1	2	14	16	5 NW 15-35
MIDDLE THIRD															
22. Lost Nation	20 Dec	45	4040	10	5	36	350	4	1	7	5	2	-5	12	1 SW 5-10
23. North Linn	28 Dec	49	7631	17	6	61	666	18	8	65	2	14	22	30	3 E 5-15
24. Cedar Rapids	4 Jan	64	13674	22	9	74	593	30	9	52	14	?	30	55	0 NW 0-5
25. Iowa City	22 Dec	53	8353	25	8	57	584	28	5	104	12	42	20	39	0 S 0-5
26. Amana	28 Dec	33	692	7	2	13	25	6	1	2	0	0	30	35	2 calm
27. Ced Falls-Water.	22 Dec	46	5413	1	1	9	125	1	1	11	0	0	22	30	0 W 10-20
28. Marshalltown	21 Dec	38	2627	14	5	36	285	5	0	0	4	28	23	38	0 S 5-15
29. Eldora-Union	23 Dec	30	1937	6	3	20	224	4	1	4	5	15	10	20	1 NW 10-20
30. Ames	21 Dec	52	17991	29	16	95	341	73	2	4	10	20	25	30	2 NW 5-10
31. Boone County	1 Jan	54	7162	33	15	91	493	50	3	10	7	40	33	38	2 W 5-10
32. Walnut Creek	28 Dec	25	593	3	1	6	76	2	0	0	0	0	29	31	1 N 0-10
33. Saylorville	22 Dec	65	15054	19	9	86	585	43	3	42	0	0	17	30	0 NE 10-20
34. Des Moines	28 Dec	54	26778	12	6	43	347	24	4	8	5	20	9	29	2 calm
35. Jamaica	20 Dec	55	20415	9	4	42	459	19	2	21	1	4	-5	22	1 SSW 5-20
36. Carroll	28 Dec	34	2440	3	2	15	55	1	1	7	3	2	?	24	6 W 0-5
37. Sac County	29 Dec	33	2459	10	4	20	220	3	0	0	4	8	0	15	8 ?
38. Ida County	21 Dec	40	3699	13	4	43	201	2	0	0	3	20	?	?	1 E 5-10
SOUTHERN THIRD															
39. Van Buren Co.	4 Jan	27	391	1	1	14	99	4	3	15	0	0	34	49	0 WNW 5-25
40. Rathbun	21 Dec	52	15553	22	8	59	727	18	4	15	3	9	30	38	0 S 15-23
41. Red Rock Res.	21 Dec	52	11300	10	7	46	495	19	1	8	1	6	29	37	1 calm
42. Lamoni	21 Dec	37	2811	8	4	28	324	21	1	7	1	5	32	32	0 SW 10-15
43. Taylor County	27 Dec	27	2129	5	2	14	150	2	0	0	2	2	21	31	1 E 0-5
44. Montgomery Co.	22 Dec	32	4699	11	3	20	17	4	1	6	0	0	18	27	0 NW 5-12
TOTAL			362,522												

Blue Jay numbers were the lowest in the last ten years, probably reflective of the poor acorn crop. After last year's strong showing, Red-breasted Nuthatches were scarce this year with only 52 reported, well below the 10-year average of 162. Carolina Wrens made a strong showing this year with 72 reported statewide; 39 of

Table 2a. Christmas Bird Count Data, 1996-97.

Location	Gr Bl He	Sn Go	Ca Go	Wo Du	Gr Wi Te	Am Bl Du	Ma	No Pi	Ga	Am Wi	Ca	Ri Ne Du	Le Sc
MISSISSIPPI RIVER													
1. Yellow River Forest				1		8	517				1		
2. Dubuque	1		61			3	825						
3. Clinton	1		676	1		75	1,362	1		1	1		
4. Princeton	1		29				131						6
5. Davenport	11	11	1,407	2	4	22	3,046	2	6	2	3	3	1
6. Buffalo			181			4	172						1
7. Muscatine			1,060			3	86						
8. Oakville	18		91				21		3				
9. Burlington	9	1	874			2	505		2	1	10		
10. Keokuk	11	2	1,206	4		1	785		10	2	210	9	54
Subtotal	52	14	5,585	8	4	118	7,450	3	21	6	225	12	62
MISSOURI RIVER													
11. Sioux City	2					2	1,342						
12. DeSoto NWR	1	5,193	2,180				714						
13. Omaha, NE	1	538	617	8	1		317						6
14. Glenwood			456				1,126						
15. Shenandoah		1	34	2	1	1	19,566	14	4				
Subtotal	4	5,732	3,287	8	3	3	23,065	14	4	0	0	0	6
NORTHERN THIRD													
16. Decorah			21				2						
17. Bremer County			5				10						
18. Mason City			484	2			1,215						
19. Spirit Lake			141	2	2		68		11				
20. Cherokee			4	3			72						
21. Westfield													
Subtotal	0	0	655	7	2	0	1,367	0	11	0	0	0	0
MIDDLE THIRD													
22. Lost Nation			143				35						
23. North Linn			193				171						
24. Cedar Rapids			3,102	2		6	2,443	1	1			2	6
25. Iowa City	3		2,328	3		1	356						
26. Amara													
27. Cedar Falls-Waterloo			795			5	305						
28. Marshalltown		1	253				82						
29. Eldora-Union							4						
30. Ames	1	2	72				112						
31. Boone County			1				8						
32. Saylorsville			1,153	7	1	7	4,760	5	3	7			
33. Des Moines		4	3,950				607		2				
34. Walnut Creek NWR			30										
35. Jamaica		3	16,202				852	1	7	1		1	3
36. Carroll		3	250				305						
37. Sac County			450				150						
38. Ida County			1,034	1			184						
Subtotal	4	13	29,956	13	1	19	10,374	7	13	8	0	3	9
SOUTHERN THIRD													
39. Van Buren County			2										
40. Rathbun	1	1	4,200			5	6,297	3		1			
41. Red Rock Reservoir	1		3,130			3	1,357		47	3			7
42. Lamon	1		979				150						
43. Taylor County													
44. Montgomery County			5										
Subtotal	3	1	8,316	0	0	8	7,804	3	47	4	0	0	7
TOTAL	63	5,760	47,799	36	10	148	50,060	27	96	18	225	15	84
	Gr Bl He	Sn Go	Ca Co	Wo Du	Gr Wi Te	Am Bl Du	Ma	No Pi	Ga	Am Wi	Ca	Ri Ne Du	Le Sc

Table 2b. Christmas Bird Count Data, 1996-97.

Location	Co Go	Ho Me	Co Me	Ba Ea	No Ha	Sh Ha	Co Ha	No Go	Ac Sp	Re Sh Ha	Re Ta Ha	Ro Le Ha	Am Ke	Ri Ne Ph
MISSISSIPPI RIVER														
1. Yellow River Forest				127		1					40	7	4	15
2. Dubuque			1	80							41	11	14	8
3. Clinton	78		254	68	3		3			1	29	1	15	9
4. Princeton	339		694	73	2	3	2				20	3	12	13
5. Davenport	403	2	115	218		4	2				47	1	44	3
6. Buffalo	36			74		1	1				25	2	10	3
7. Muscatine	19		15	26			1				23		11	3
8. Oakville			9	49	2	1	4			2	29	3	9	16
9. Burlington	11		18	200	2	4	2		2		48	5	37	6
10. Keokuk	8,000	3	284	152	5	3	3			1	30	2	10	1
Subtotal	8,886	5	1,390	1,067	14	17	18	0	2	4	332	35	166	77
MISSOURI RIVER														
11. Sioux City	62		9	6		2					56	8	19	117
12. DeSoto NWR	21		90	43							25		5	34
13. Omaha, NE	66		87	23	3	2					53		23	
14. Glenwood				44	1						20		17	
15. Shenandoah			19	20	3	1	1				48		37	102
Subtotal	149	0	205	136	7	5	1	0	0	0	202	8	101	253
NORTHERN THIRD														
16. Decarah				8			1				36	3		7
17. Bremer County				1		1	2				12	2	4	17
18. Mason City	1						2	1			19	1	1	160
19. Spirit Lake		1									1		1	697
20. Cherokee				1							19		2	12
21. Westfield				1		1					5	4	1	71
Subtotal	1	1	0	11	0	2	5	1	0	0	92	10	9	964
MIDDLE THIRD														
22. Lost Nation				14	4	2	3				56	18	20	66
23. North Linn				12	1	1	1	1			33	1	27	253
24. Cedar Rapids	197	8	8	76		3	5				43	3	36	23
25. Iowa City				35	4	1	1	1			51	5	14	18
26. Amana				1	1						4	1	4	3
27. Cedar Falls-Waterloo				1		2	1		1		15	3	5	25
28. Marshalltown				3					1		20		4	29
29. Eldora-Union											12	2		19
30. Ames	1			5	1	4	3				27	1	10	88
31. Boone County				3		2					40	1	6	104
32. Saylorville	7		46	35	3	3	1				45	1	16	36
33. Des Moines			5	29		2					45	2	13	5
34. Walnut Creek NWR				1	1						10		4	51
36. Jamaica			46	3		1					36	1	3	13
37. Carroll			6								5		3	43
38. Sac County				2							21	5	5	134
39. Ida County											21		13	57
Subtotal	205	8	111	220	15	21	15	2	0	2	484	44	183	967
SOUTHERN THIRD														
40. Van Buren County				11	3						5		4	
41. Rathbun			204	63	15	3	1				40	1	50	5
42. Red Rock Reservoir	60		104	151	1	1	1	1			47		11	16
43. Lamoni				3	3		1				32	6	18	
44. Taylor County					2						2		2	13
45. Montgomery County											25	1	12	18
Subtotal	60	0	308	228	24	4	3	1	0	0	151	8	97	52
TOTAL	9,301	14	2,014	1,662	60	49	42	4	2	6	1,261	105	556	2,313
	Co Go	Ho Me	Co Me	Ba Ea	No Ha	Sh Ha	Co Ha	No Go	Ac Sp	Re Sh Ha	Re Ta Ha	Ro Le Ha	Am Ke	Ri Ne Ph

Table 2c. Christmas Bird Count Data, 1996-97.

Location	Wi Tu	No Bo	Ki	Co Sn	Ri Bi Gu	He Gu	Ro Do	Mo Do	Ea Sc Ow	Gr Ho Ow	Ba Ow	Lo Ow	Sh Ea Ow	Be Ki
MISSISSIPPI RIVER														
1. Yellow River Forest	272			1			309	40	2	4	2			1
2. Dubuque	66				4		331	99			1	9		3
3. Clinton	2			1	44	359	208	256	3	17	5			3
4. Princeton	75		1	3		89	42	179	4	9	3		1	6
5. Davenport	8			1	149	701	1,610	677	2	18	7	1		8
6. Buffalo						32	532	121	2	4	3			2
7. Muscatine		1		1	2	17	74	386	7	13	3			5
8. Oakville	1	23		2		4	209	140	6	23	9	1	1	6
9. Burlington				3	2	27	16	180		2	3			6
10. Keokuk	210			2	5	1,930	430	402	84	1	2	1		4
Subtotal	634	24	6	16	2,156	1,648	3,897	2,135	27	92	37	11	2	44
MISSOURI RIVER														
11. Sioux City	18	8					711	1	4	7	1			2
12. DeSoto NWR		8			1		98	12	4	2	1			
13. Omaha, NE	37	8			1	1	66	60	2	3	1			2
14. Glenwood		24					97		6					
15. Shenandoah	7	122				1	117	116		8	2	2	3	1
Subtotal	62	170	0	0	2	2	1,089	189	16	20	5	2	3	5
NORTHERN THIRD														
16. Decorah	91		1	2			201	2	2	2				6
17. Bremer County	7						216	1	1	1	2			1
18. Mason City							80	31	2	3	2		1	
19. Spirit Lake							56	1		3				2
20. Cherokee	21						246		2	3	1			
21. Westfield	13						22							
Subtotal	132	0	1	2	0	0	821	35	7	12	5	0	1	9
MIDDLE THIRD														
22. Lost Nation	117						57	34	1	7	1		4	2
23. North Linn	59						78	187	5	13	8			1
24. Cedar Rapids	27				278	42	383	127	2	14	8			9
25. Iowa City	53				12	39	142	132	1	10	7			10
26. Amana	17						35	18	1	1				
27. Cedar Falls-Waterloo	5						94	19	2	2	3	2	1	2
28. Marshalltown	1						362	20		1				1
29. Eldora-Union	5						59	19						1
30. Ames							256	58		1	2		2	2
31. Boone County	31						135	61	11	5	5	3		3
32. Saylorville	11				1		159	10	3	14	4	1	6	2
33. Des Moines	5						273	76	1	5	6			6
34. Walnut Creek NWR							11	5			1			
35. Jamaica	24	6					62		2	3	3	4	1	3
36. Carroll							352	28	3	2				
37. Sac County							70	6		3	1			
38. Ida County		3					72	2		5				3
Subtotal	355	9	0	0	291	81	2,600	802	32	86	50	10	14	45
SOUTHERN THIRD														
39. Van Buren County					115	3	9				1			
40. Rathbun	32	3			774	400	55	19	1	8	1			2
41. Red Rock Reservoir	1	1			1,063	205	117	15		2	1			4
42. Lamoni	6	10					76	15		1		1		3
43. Taylor County							34	7						
44. Montgomery County							83		1	4	1			
Subtotal	39	14	0	0	1,952	608	374	56	2	15	4	1	0	9
TOTAL														
	1,222	217	7	18	4,401	2,339	8,781	3,217	84	225	101	24	20	112
	Wi Tu	No Bo	Ki	Co Sn	Ri Bi Gu	He Gu	Ro Do	Mo Do	Ea Sc Ow	Gr Ho Ow	Ba Ow	Lo Ea Ow	Sh Ea Ow	Be Ki

Table 2d. Christmas Bird Count Data, 1996-97.

Location	Re He Wo	Re Be Wo	Ye Be Sa	Do Wo	Ha Wo	No Fl	Pi Wo	Ho La	Bl Ja	Am Cr	Bl Ca Ch	Tu Ti
MISSISSIPPI RIVER												
1. Yellow River Forest		29		54	9		7	77	96	84	120	10
2. Dubuque	1	29		52	16	2	3	104	85	236	286	63
3. Clinton	4	33		72	23	7	4	7	158	627	159	24
4. Princeton	9	30		58	10	4	3	16	76	132	83	23
5. Davenport	19	57	1	144	18	10	6	2	184	1,139	390	81
6. Buffalo	5	33		60	13	4	2	10	55	178	117	40
7. Muscatine	3	29		70	21	4	4	60	103	91	175	45
8. Oakville	10	60		144	32	6	8	12	144	4,177	177	65
9. Burlington	9	38		57	11	12	2		76	378	213	42
10. Keokuk	15	24		49	12	17		29	160	20,000	194	44
Subtotal	75	362	1	760	165	66	39	317	1,137	27,042	1,914	437
MISSOURI RIVER												
11. Sioux City		25		74	12	50			69	385	192	
12. DeSoto NWR	1	41	1	65	2	56			156	67	179	
13. Omaha, NE		67	1	109	13	19			38	329	421	53
14. Glenwood		5		14	3	10		28	45	119	33	2
15. Shenandoah	3	48		53	5	8			192	68	71	1
Subtotal	4	186	2	315	35	143	0	28	500	968	896	56
NORTHERN THIRD												
16. Decorah		24		32	11	2	3	6	130	213	119	8
17. Bremer County	2	3		10	3	3	1		23	256	19	
18. Mason City		9		42	9	1			86	492	100	
19. Spirit Lake		17		65	30	3		24	110	79	290	
20. Cherokee		11		23	6	11		2	105	107	56	
21. Westfield		4		8	2	5		45	15	36	20	
Subtotal	2	68	0	180	61	25	4	77	469	1,183	604	8
MIDDLE THIRD												
22. Lost Nation	8	27		54	4	6		6	128	619	125	14
23. North Linn	6	41		80	16	12	2	267	124	148	267	28
24. Cedar Rapids	6	40		102	11	5	1	6	94	1,709	511	38
25. Iowa City	8	50		95	16	9			92	1,721	320	43
26. Amana	4	9		16	1	2	3		30	40	45	
27. Cedar Falls-Waterloo	3	17		21	5	2	2		42	1,665	65	
28. Marshalltown	1	28		21	5	5			75	193	90	3
29. Eldora-Union	1	7		17	7	1		4	41	67	27	
30. Ames	1	50		149	24	7		34	147	11,700	394	8
31. Boone County	1	112		216	34	1	1	3	50	474	739	52
32. Saylorville	4	49		182	21	17		3	94	1,142	301	14
33. Des Moines	1	60	1	84	15	10	2	20	105	12,000	262	17
34. Walnut Creek NWR		1		8		27			5	19	16	
35. Jamaica	3	16		49	6	2		5	59	86	120	
36. Carroll		1		9	2			299	19	244	7	
37. Sac County		7		24	4	1		189	35	52	17	
38. Ida County		3		26	2	3		118	44	304	50	
Subtotal	47	518	1	1,153	173	110	11	954	1,184	32,183	3,356	217
SOUTHERN THIRD												
39. Van Buren County	8	4		3		1		1	27	32	2	3
40. Rathbun	12	22		64	6	51			132	195	96	25
41. Red Rock Reservoir		21		51	10	11		2	43	2,122	143	10
42. Lamon	12	2		3	2	15			96	224	25	2
43. Taylor County	8	1		6	3	8			26	39	27	3
44. Montgomery County		13		27	6	1			104	26	96	
Subtotal	40	63	0	154	27	87	0	3	428	2,638	389	43
TOTAL	168	1,197	4	2,562	461	431	54	1,379	3,718	64,014	7,159	761
	Re He Wo	Re Be Wo	Ye Be Sa	Do Wo	Ha Wo	No Fl	Pi Wo	Ho La	Bl Ja	Am Cr	Bl Ca Ch	Tu Ti

Table 2e. Christmas Bird Count Data, 1996-97.

Location	Re Br Nu	Wh Br Nu	Br Cr	Ca Wr	Wi Wr	Go Cr Ki	Ea Bl	Am Ro	Ce Wa	No Sh	Lo Sh	Sh Sp	Eu St
MISSISSIPPI RIVER													
1. Yellow River Forest	3	49			2	2			143	1			390
2. Dubuque	5	90	4				3		28				307
3. Clinton		44	12	5	3	7		1	73				935
4. Princeton		44	9		1	11		1					803
5. Davenport		109	41	4			1	5	26		1		2,688
6. Buffalo		50	14			3							775
7. Muscatine		70	5	4	1		1		4				2,647
8. Oakville		110	35	5		4	1				1		1,376
9. Burlington		54	13	8	5	2	12	6	90				834
10. Keokuk	1	31	15	39	2	6	16	5	60				2,066
Subtotal	9	651	148	65	14	35	34	18	424	1	2	0	12,821
MISSOURI RIVER													
11. Sioux City	3	69	10					23	17	1			966
12. DeSoto NWR	2	46	6					1					538
13. Omaha, NE	2	140	8	1		4		5	20				1,903
14. Glenwood		12	2					154	136				722
15. Shenandoah		42	8					84	35		8		1,008
Subtotal	7	309	34	1	0	4	0	267	208	1	8	0	5,137
NORTHERN THIRD													
16. Decorah		52	3		1			7	137				477
17. Bremer County		10	2						17	1			542
18. Mason City	1	17	3						11				167
19. Spirit Lake	6	74	3					2		1			1,443
20. Cherokee	1	21	2					3	241				304
21. Westfield		3	2										116
Subtotal	8	177	15	0	1	0	0	12	406	2	0	0	3,049
MIDDLE THIRD													
22. Lost Nation	4	23	8			9							546
23. North Linn		58	6					1	65	1	2		779
24. Cedar Rapids	3	103	23	2				7	64				1,620
25. Iowa City	1	83	4	2				1	1	1			702
26. Amana		23	1										40
27. Cedar Falls-Waterloo		14	3					1	23	2			620
28. Marshalltown	1	57	1					14	13				462
29. Eldora-Union		15	1										243
30. Ames	1	105	15	1					11	2			1,980
31. Boone County	2	272	4		1			2	13				1,290
32. Saylorsville	1	81	3		1			2	8	2	1	1	2,469
33. Des Moines	10	110	3	1		1		2	2				5,250
34. Walnut Creek NWR		4									2		20
35. Jamaica		45	1						31	1			512
36. Carroll		5	2										280
37. Sac County		14										3	328
38. Ida County	4	14	7					2					603
Subtotal	27	1,026	82	6	2	10	0	32	231	9	3	6	17,744
SOUTHERN THIRD													
39. Van Buren County		5											15
40. Rathbun	1	29	1			4							372
41. Red Rock Reservoir		22					4		17		1	1	515
42. Lamoni		4					25	3	26				471
43. Taylor County		12	1			5							324
44. Montgomery County		39	2					2	28				1,303
Subtotal	1	111	4	0	0	9	29	5	71	0	1	1	3,000
TOTAL	52	2,274	283	72	17	58	63	334	1,340	13	14	7	41,751
	Re Br Nu	Wh Br Nu	Br Cr	Ca Wr	Wi Wr	Go Cr Ki	Ea Bl	Am Ro	Ce Wa	No Sh	Lo Sh	Sh Sp	Eu St

Table 2f. Christmas Bird Count Data, 1996-97.

Location	No Ca	Am Tr Sp	So Sp	Sw Sp	Wh Th Sp	Wh Cr Sp	Ha Sp	Da Ey Ju	La Lo	Sn Bu	Re Wi Bl
MISSISSIPPI RIVER											
1. Yellow River Forest	168	225	4					506		138	
2. Dubuque	209	452	7					927		75	
3. Clinton	219	471	29	4	1	1		433	50	8	2
4. Princeton	157	429	27	4	2	8		318	3	82	55
5. Davenport	395	925	114	32	20			650			457
6. Buffalo	134	342	46	1	2			351			1
7. Muscatine	266	740	39	1	5	2		703	26		
8. Oakville	326	1,512	95	21	2	2		1,220		1	35
9. Burlington	269	343	24	7	1	1		373			8
10. Keokuk	276	321	90	8	5	7		565			3
Subtotal	2,419	5,760	475	78	38	21	0	6,046	79	304	561
MISSOURI RIVER											
11. Sioux City	67	334	10				14	389			75
12. DeSoto NWR	119	546	1				53	613			6
13. Omaha, NE	105	220	1				20	347			
14. Glenwood	20	74	2					36			56
15. Shenandoah	167	190	2				39	185			30
Subtotal	478	1,364	16	0	0	0	126	1,570	0	0	167
NORTHERN THIRD											
16. Decorah	162	64	3					293			
17. Bremer County	26	212						135	550		3
18. Mason City	81	87			3		6	249	75	1,173	
19. Spint Lake	18	4						219	3	125	
20. Cherokee	18	13					2	114	2		1
21. Westfield	3	19						41		58	16
Subtotal	308	399	3	0	3	0	8	1,051	630	1,356	20
MIDDLE THIRD											
22. Lost Nation	168	186	12			1		414			
23. North Linn	224	670	12		1			806	28	1,058	
24. Cedar Rapids	435	242	30	4	7			532			2
25. Iowa City	259	405	18		9	9		403	1		
26. Amana	28	110	7			15		60			
27. Cedar Falls-Waterloo	64	370	1					278			8
28. Marshalltown	127	19			1			304			1
29. Eldora-Union	49	162	1					167	285	9	
30. Ames	255	150	14		4		36	585			3
31. Boone County	374	872	96	4	2	1	24	749	5	37	4
32. Saylorville	235	1,702	51	4		1	10	801	60		79
33. Des Moines	268	810	67	1			1	493	22	51	
34. Walnut Creek NWR	24	258	12					30			
35. Jamaica	117	577	6	1			5	504	53		200
36. Carroll	4	73	1		1		1	79		65	
37. Sac County	55	56					4	115	3	110	
38. Ida County	15	262	5				6	123	9	15	
Subtotal	2,701	6,924	333	14	25	27	87	6,443	466	1,345	297
SOUTHERN THIRD											
39. Van Buren County	5	14	1					8			
40. Rathbun	150	679	5	3				450		2	26
41. Red Rock Reservoir	109	757	14					348			
42. Lamoni	44	212	3					182			
43. Taylor County	7	1,014				1		228			
44. Montgomery County	63	969	13				52	270			325
Subtotal	378	3,645	36	3	0	1	52	1,486	0	2	351
TOTAL	6,284	18,092	863	95	66	49	273	16,596	1,175	5,007	1,396
	No Ca	Am Tr Sp	So Sp	Sw Sp	Wh Th Sp	Wh Cr Sp	Ha Sp	Da Ey Ju	La Lo	Sn Bu	Re Wi Bl

Table 2g. Christmas Bird Count Data, 1996-97.

Location	Me Sp	Ru Bl	Co Gr	Br			Ho Fi	Re Cr	Pi Si	Am Go	Ho Sp	Eu Tr Sp
				He Co	Pu Fi	Ho Fi						
MISSISSIPPI RIVER												
1. Yellow River Forest			1		16	30				174	659	
2. Dubuque			1		1	79			4	186	1,035	
3. Clinton	5	1	5	8	7	120				117	850	
4. Princeton			3	65	4	330				153	1,326	
5. Davenport			50	75	17	401				201	1,840	
6. Buffalo					3	20				46	1,287	
7. Muscatine			2		19	185				128	2,269	45
8. Oakville			2	56	4	48				140	1,948	91
9. Burlington	1				4	44			1	161	447	124
10. Keokuk				11	6	31				207	747	37
Subtotal	6	1	64	215	81	1,288	0	5	1,513	12,408	297	
MISSOURI RIVER												
11. Sioux City	1	1	1		14	200		4	117		649	
12. DeSoto NWR				1		40				71	445	
13. Omaha, NE	2		1			35		1	241		460	
14. Glenwood			27	46	3	13				33	227	
15. Shenandoah	2					61				52	747	
Subtotal	5	1	29	47	17	349	0	5	514	2,528	0	
NORTHERN THIRD												
16. Decorah			1		1	133				127	786	
17. Bremer County	1		10	3		44				24	653	
18. Mason City			1	2	14	121		1	41		927	
19. Spirit Lake			2	1	24	90				20	1,164	
20. Cherokee	4					51		1	36		463	
21. Westfield										41		
Subtotal	5	3	13	5	39	439	0	2	289	3,993	0	
MIDDLE THIRD												
22. Lost Nation			8	1	8	83				99	893	
23. North Linn	3			48	20	76				60	1,678	
24. Cedar Rapids			1	10	3	177				166	943	
25. Iowa City	4		6		9	217				236	400	
26. Armana				10		12				80	75	
27. Cedar Falls-Waterloo			4		7	52				45	810	
28. Marshalltown					2	45				46	317	
29. Eldora-Union			15			82				25	585	
30. Ames	2		4	1	3	99				116	1,432	
31. Boone County	1		1	1	23	271		3	252		730	
32. Saylorville			1	3	2	25	11	1	499		824	
33. Des Moines	2	3	70	1		133			372		1,491	
34. Walnut Creek NWR						2				7	44	
35. Jamaica				4		172	1		180		373	
36. Carroll	12					65				4	265	
37. Sac County	2					5				27	558	
38. Ida County			5	1	5	45	10	10	70		544	
Subtotal	26	4	117	79	80	1,561	22	14	2,284	11,962	0	
SOUTHERN THIRD												
39. Van Buren County						8			100		1	
40. Rathbun	4					123			279		635	
41. Red Rock Reservoir	3				1	27	3		188		526	
42. Lamon	3								27		125	
43. Taylor County	1			3					68		284	
44. Montgomery County			1	1		77			36		1,095	
Subtotal	11	0	1	4	1	235	3	0	698	2,666	0	
TOTAL	53	9	224	350	218	3,872	25	26	5,298	33,557	297	
	Me Sp	Ru Bl	Co Gr	Br He Co	Pu Fi	Ho Fi	Re Cr	Pi Si	Am Go	Ho Sp	Eu Tr Sp	

these were at Keokuk. This is the best showing in the last ten years and above the 10-year average of 42. Ninety percent were from Mississippi River counts, and all were in the eastern half of the state except for one at Omaha.

Golden-crowned Kinglets were again scarce this year; 60% were from Mississippi River counts. Numbers of three fruit-eating species (Eastern Bluebird, American Robin, and Cedar Waxwing) were all well below average this year. As is often the case, most (80%) of the robins were on Missouri River counts. Northern Shrikes were scarce this year after a big invasion last year. Most (69%) were found on counts in the Middle Third, and none were found in southern Iowa. Only ten Yellow-rumped Warblers were found this year, the lowest total since 1991-92. All were found in southeastern Iowa.

Northern Cardinal numbers were about average, but the highest since 1991-92. Only five towhees (three Spotted and two Easterns) were found this year. Most unusual were the two Easterns described from Ida County. This was a good year for American Tree Sparrows. The total of 18,092 was the highest since 1989-90 and well above the 10-year average of 15,000. Six Field Sparrows were reported this year. Birds at Buffalo (2) and Jamaica (1) were well-described. Minimal detail was given for a bird at Carroll. The Davenport birds were not described. This species is a very rare winter resident in Iowa, and all future CBC reports should be documented. Similar comments apply to winter records of Lincoln's Sparrow in Iowa. A flock of ten at Davenport was not adequately described, although the observer stated it was an expected find there in winter. There are almost no documented records (outside of the CBC period) between 1 December and 1 April (see Kent and Dinsmore 1996). Song Sparrow numbers were above average this year; 55% were on Mississippi River counts and 39% were on counts in the Middle Third. Among the *Zonotrichia* sparrows, White-throated Sparrows were down almost 50%, White-crowned Sparrows were present in average numbers, and Harris's Sparrows reached their highest total since 1989-90. Most White-throated Sparrows (58%) were on Mississippi River counts. Harris's Sparrows were most numerous on counts in the Middle Third (32% of total) and along the Missouri River (46% of total).

Lapland Longspurs made a strong showing this year. The 1,175 reported were above the 10-year average of 881 and the best count since 1990-91. Snow Buntings were also present in above normal numbers, the 3,007 reported being the highest total in the last ten years and ten times the 10-year average of 300.

Icterid numbers were low this year. Numbers of Red-winged Blackbirds, Rusty Blackbirds, and meadowlarks were the lowest in the last ten years. Forty-five Great-tailed Grackles were at Bartlett on the Glenwood count, continuing their tendency to occasionally overwinter in southwestern Iowa. Brown-headed Cowbird was the only icterid to be found in near-average numbers this year.

Winter finches were scarce this year. Numbers of Purple Finches (218) and Pine Siskins (26) were the lowest in the last ten years, well below their 10-year averages of 638 and 978, respectively. House Finch numbers continue to increase; this year's total of 3,872 beat the previous record of 2,952 in 1994-95. Only 25 Red Crossbills were detected, all on counts in central Iowa. This total is surprisingly low given the scope of the invasion last summer and fall. The only Common Redpolls reported were eight at Burlington, an unusual (and undocumented) report in a year when this species was scarce even in northern Minnesota. The lone Evening Grosbeak at Marshalltown was present at a feeder for much of the winter.

In the fringillids, the decline in House Sparrow numbers leveled off this year. The 33,557 reported was the highest since 1992-93, but well below the 10-year average of

46,000. This year, the Westfield count reported no House Sparrows, an almost unbelievable feat in Iowa. It is hard to believe that there is a CBC circle in Iowa not inhabited by this species. Eurasian Tree Sparrows continue to expand their range north along the Mississippi River. This year, 297 were reported from four counts, all in southeastern Iowa.

Table 3. Species recorded on fewer than five Christmas Bird Counts, 1996-97.

Pied-billed Grebe	Keokuk (1), Cherokee (1), Cedar Rapids (2)
American White Pelican	Cedar Rapids (1)
Double-crested Cormorant	Davenport (43)
Trumpeter Swan	Sac County (3)
Mute Swan	Ida County (8)
Swan Sp.	Burlington (2-reported as Trumpeters)
Greater White-fronted Goose	DeSoto NWR (2), Mason City (1), Jamaica (2)
Northern Shoveler	Saylorville (1)
Redhead	Davenport (1), Keokuk (4), Spirit Lake (2)
Greater Scaup	Davenport (2), Keokuk (4)
Oldsquaw	Keokuk (7)
Black Scoter	Keokuk (1)
Bufflehead	Dubuque (1), Keokuk (8)
Red-breasted Merganser	Princeton (2), Red Rock Reservoir (1)
Ruddy Duck	Keokuk (6)
Golden Eagle	Yellow River Forest (3), Decorah (1)
Merlin	Carroll (1)
Prairie Falcon	Shenandoah (1)
Gray Partridge	Mason City (4), Spirit Lake (76), Cherokee (7)
Ruffed Grouse	Decorah (1)
American Coot	Cedar Rapids (6), Jamaica (1)
American Woodcock	Cedar Rapids (1)
Thayer's Gull	Clinton (1), Davenport (2)
Glaucous Gull	Clinton (1), Davenport (1), Red Rock Reservoir (2)
Northern Saw-whet Owl	Oakville (1), Cedar Falls-Waterloo (1), Boone County (1)
Ruby-crowned Kinglet	Shenandoah (3), Lost Nation (2)
Townsend's Solitaire	Cherokee (1)
Hermit Thrush	Princeton (1), North Linn (1)
Gray Catbird	Cedar Rapids (1), Ames (1)
Brown Thrasher	Cedar Rapids (1)
Yellow-rumped Warbler	Burlington (3), Keokuk (5), Rathbun (2)
Eastern Towhee	Ida County (2)
Spotted Towhee	Mason City (1), Shenandoah (2)
Field Sparrow	Davenport (2), Buffalo (2), Jamaica (1), Carroll (1)
Vesper Sparrow	Jamaica (1)
Fox Sparrow	Muscatine (1), Keokuk (2), Ames (11), Des Moines (1)
Lincoln's Sparrow	Oakville (1), Keokuk (1)
Great-tailed Grackle	Glenwood (45)
Pine Grosbeak	Saylorville (1)
Common Redpoll	Burlington (8)
Evening Grosbeak	Marshalltown (1)

NOTABLE MISSES

As in most years, there were a number of notable misses. This year, birds in this category included Ross's Goose (8 of last 10 years), Snowy Owl (6 of last 10), Northern Mockingbird (7 of last 10), and Brewer's Blackbird (8 of last 10). Peregrine Falcon might also fall into this category since it has been detected the last five years.

UNCOMMON SPECIES

The only species new to the Iowa all-time CBC list was an American Woodcock at Cedar Rapids. Other good finds were a Black Scoter at Keokuk (5th CBC record), a Prairie Falcon at Shenandoah, a Townsend's Solitaire at Cherokee, and a Pine Grosbeak at Saylorville. Also, a family group of two adult and one immature Trumpeter Swans returned again this year to Black Hawk Lake for the Sac County CBC. A number of rarities were reported this year with few, if any, details. These included Peregrine Falcon and Gyrfalcon at Davenport, Iceland Gull at Muscatine, Ruby-crowned Kinglet at Omaha, Osprey and Lincoln's Sparrow at DeSoto National Wildlife Refuge, Savannah Sparrow at Spirit Lake, Bonaparte's Gull at Van Buren County, Lark Sparrow at Shenandoah, Turkey Vulture in Ida County, and Ruby-crowned Kinglet at Omaha. Chukar was again reported at Davenport, but the species is not on the official state list. Two Trumpeter Swans at Burlington were changed to swan species for lack of details. A number of counts reported Western Meadowlarks, but none of them gave any indication as to why the birds weren't Easterns. An interesting report was the eight Mute Swans in Ida County. As noted by compiler Pete Ernzen, the birds are free-flying and locally established, but are fed and protected in the winter. The question is, are they countable? Most reports of Mute Swans in Iowa are subject to debate. They are not prone to wandering, although some of the winter birds along the Mississippi River could be from populations around the Great Lakes. Elsewhere in Iowa, records of this species are harder to evaluate.

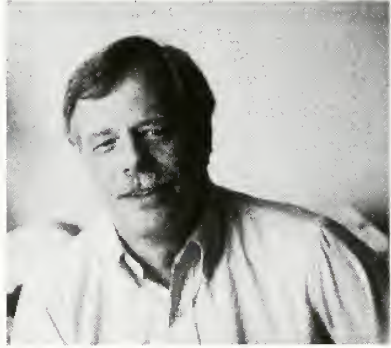
4024 Arkansas Drive, Ames, IA 50014

FIELD REPORTS--WINTER 1996-97

ROBERT CECIL

WEATHER

Overall, 1996 was the coldest year since 1917, averaging 2.8 degrees below average. December contributed to the cold by averaging 3.4 degrees below normal. John Van Dyk noted that the first of the frigid weather arrived on 18 December with below zero temperatures, blizzard warnings, and wind chills of -55 in Sioux Center. This was also the month that began the record-breaking snows to Minnesota and the Dakotas. January started out the same by averaging 2.9 degrees below normal, and more snow, with ground blizzard conditions in northern Iowa on four different occasions. In Iowa, the trend changed in February, when it was 2.1 degrees above normal. Precipitation was above normal; however, the month was the seventh snowiest among 110 years of state snowfall records. While there is little empirical information on the effects of the winter on wintering birds, some observers commented that in the blizzard belt of northwestern Iowa, pheasants were probably wiped out. It will be interesting to see whether the notoriously tough Gray Partridge will suffer the same fate, or continue what is evidently a modest recovery.



GENERAL TRENDS

The relatively mild fall seemed to presage the presence of many birds into winter period, but it was not to be. Two cold snaps in the third and fourth weeks of December froze almost all of the state's open water, forcing out most of the waterfowl and gulls. Those that remained did so in low numbers. Evidently, the waterfowl and gulls were followed out of the state by the passerines; as a result, the number of species on Christmas Bird Counts was well below last year's totals. While the departure of borderline wintering species was noteworthy, the arrival of wintering migrants was spotty. Staying home were almost all the winter finches, including the usually common Pine Siskin. The huge snows in the Dakotas and Minnesota were probably responsible for the arrival of greater-than-usual numbers of two ground-feeding species, Lapland Longspur and Snow Bunting. Northern Shrikes were also widely reported, probably for the same reason.

UNUSUAL SPECIES

The "Patagonia Picnic Table Effect" was in full swing in Cerro Gordo County. Named after Patagonia, Arizona, where the discovery of one rarity drew birders who found subsequent rarities, the second annual occurrence of Great Gray Owls brought in birders who later found one of Iowa's great ornithological challenges, a Ferruginous Hawk; also a Prairie Falcon, Northern Goshawk, and other good birds.

In addition to the Great Gray Owls and Ferruginous Hawk, other accidental species included a Pomarine Jaeger. One of three found during the fall season remained at Red Rock Reservoir through mid-December. The other big news was the two-bird

invasion of corvids. A cooperative Clark's Nutcracker spent a few days in Mills County, and an immature Pinyon Jay in Boone County remained through the end of February.

Reports of rare winter birds included Franklin's Gull, Sedge Wren, Cape May Warbler, Palm Warbler, Chipping Sparrow, and Baltimore Oriole. Reports of Ferruginous Hawk, American Woodcock, Iceland Gull, Lark Sparrow, Savannah Sparrow, and Pine Grosbeak have all been referred to the Records Committee and if accepted, will make this a rich winter for unusual species.

SPECIES DATA

(* = documented); [] = record date

Pied-billed Grebe: Overwintering birds included 1 at Spring L. in Cherokee (SJD, PE) and 1 at Cedar L. in Cedar Rapids (DLD, THK).

American White Pelican: An injured bird at Cedar L. survived until at least 4 Jan, but later died (Cedar Rapids Gazette, 23 Jan).

Double-crested Cormorant: All: an imm. on 2-6 Dec at Cedar L. (DLD, JLF, THK), an imm. on 8 Dec., on the Des Moines R. in Polk Co. (SJD), and 4 on 6 Feb below the Red Rock dam (SJD).

Great Blue Heron: February reports included 3 on the 6th on the Des Moines R. below the Red Rock dam (SJD) and 2 on the 8th in Davenport (PCP).

Tundra Swan: All: an imm. on 7 Dec at Hallett's Quarry in Story Co. (SJD-details).

Trumpeter Swan: 2 adults were in Burlington on 21 Dec (JLF).

Swan species: An imm. was at Saylorville Res. on 1 Dec (Gary Downs fide SJD) and an adult was seen on 12 Dec in Cedar Falls (SJD). At least 2 free-flying adult swans are in a Waterloo waterfowl collection (Francis Moore fide RCe).

Snow Goose: Reports of wintering birds included 3 at Terra L. in Johnston (SJD), 1 in Ottumwa (SJD), and 1 on 9 Jan in Madison Co. (SJD). On 21 Feb 5,000 were at at Riverton W.A. (Carl Priebe fide SJD).

Canada Goose: The largest wintering concentrations were 3,500 along the Des Moines R. below Red Rock dam (SJD), 3,000 at Bays Branch W.A. in Guthrie Co. (SJD), 3,000 in the Des Moines area (SJD), and 1,300 south of Grinnell (SJD).

Wood Duck: Winter reports from the northern half of the state included 1 at Ida Grove (PE), 2 on 15 Jan in Mason City (CJF), 3 on 30-31 Jan at Spring L. in Cherokee Co., and 1 on 30 Jan at Snyder Bend in Woodbury Co. (SJD).

Green-winged Teal: January-February records include singles on Pool 19 in Loe County on 6 Jan (SJD), in Warren Co. on 9 Jan. (SJD), and at Clear L. on 16 Feb (SJD).

American Black Duck: About 40 birds were reported wintering at 11 locations. Largest numbers were 11 on 6 Feb on the Des Moines R. below Red Rock dam (SJD) and 8 in the Des Moines area (SJD). There were also 5 at Cedar L. (DLD, THK).

Mallard: Peak mid-winter counts were 8,000 on 6 Feb below the dam at Red Rock Res. (SJD), 4,000 at Riverton W.A. on 30 Dec (SJD), and 3,000 wintering at Snyder Bend in Woodbury Co. (SJD).

Northern Pintail: No large numbers were reported. January-February reports were from Grimes, Rock Valley, Snyder Bend, Pleasant Hill, Cedar Rapids and the Des Moines R. below Red Rock Res. Returning migrants included 10 on 20 Feb at Green Valley L. in Union Co. (SJD) and 18 on 20 Feb at Twelve Mile L. in Union Co. (SJD).

Northern Shoveler: The only midwinter report was of 27 on 6 Jan in Ottumwa (SJD).

Gadwall: By far the most northerly of the three midwinter reports was 9 on 12 Jan in Dickinson Co. (LAS). Three on 23 Feb at Cedar L. were migrants (DLD).

American Wigeon: All: 3 on 30 Dec at Bartlett (SJD), 2 on 30 Dec at the MidAmerican Energy Ponds in Pottawattamie Co. (SJD), 2 on 9 Jan in Madison Co. (SJD), and 1 on 30 Jan at Blue L. in Monona Co. (SJD). One in Rock Valley was last seen on 7 Jan (JV, Marty Eby fide SJD).

Canvasback: The only reports outside the CBC period were of 2,940 on Pool 19 on 6 Jan (SJD) and 30 returning migrants near Princeton in Scott Co. on 28 Feb (PCP).

Redhead: 3 were found at three southern Iowa locations in January, Pool 19, West Des Moines, and Blue L. The first returning migrants were 3 at Green Valley L. and 11 at Twelve Mile L. on 20 Feb (SJD), and 14 on 23 Feb at Big Creek spillway in Polk Co. (PJW).

Ring-necked Duck: Up to 3 were on Cedar L. at least through 6 Feb. (DLD, JLF, THK). Other January to mid-February reports were 9 on 6 Jan at pool 19 (SJD), 1 on 9 Jan in Warren Co.

- (SJD), and 1 on 16 Feb at Clear L. (SJD). Migrants appeared on 20 Feb with reports from Green Valley L. Twelve Mile L. and Terra L. (SJD).
- Greater Scaup:** All: 1 on 13 Dec at Big Creek S.P.(SJD-details) and 11 on 6 Jan on Pool 19 (SJD-details), 1 on 16 Feb on Pool 19 (CE-details), and 1 on 28 Feb near Princeton (PCP-details).
- Lesser Scaup:** Of four midwinter reports, only one was known to have successfully wintered, a male at Cedar L. (DLD, JLF, THK). Presumably wintering were 20 on 6 Jan at Davenport, (PCP), 34 on 6 Jan at Pool 19 (SJD), and 1 on 9 Jan in West Des Moines (SJD). Returning migrants were found in southern Iowa on 20 Feb (SJD). The largest number of the season was 1,500 on 28 Feb near Princeton (PCP).
- Oldsquaw:** Most were at Pool 19, with 7 on 23-24 Dec (SJD), 11 on 6 Jan (SJD), and 3 on 23 Jan (JLF). The other reports included an imm. male at Saylorville Res. on 2 Dec (SJD), and an imm. at Hallett's Quarry on 6 Dec (HZ, JJD)[2nd Story Co. record].
- Black Scoter:** All: a female or imm. on 23 Dec at Pool 19 (*SJD), and a female on 7 Dec at West Okoboji (LAS).
- Surf Scoter:** All: 2 females or imms. on 7 Dec at West Okoboji (ETH, LAS).
- White-winged Scoter:** All: 1 on 2 Dec at Cedar L. (*DLD), 1 female on 7 Dec at West Okoboji (LAS) and 2 there the next day (ETH), and a female or imm. on 6 Jan at Pool 19 (SJD).
- Common Goldeneye:** The first report of the winter season was 60 on 7 Dec at West Okoboji (LAS). More than doubling the previous record count was a remarkable 8,000+ on 23-24 Dec at Pool 19 in Lee Co (SJD); 2,650 were still there in 6 Jan (SJD). Midwinter reports included 5 on 30 Jan at Blue L., and 42 on 6 Feb below Red Rock dam; 1 on 4 Jan at Little Wall L. was considered to be an unusual local winter record (SJD). Migrants appeared with 26 on 23 Feb at Big Creek spillway (PJW); the peak was 750 on 28 Feb near Princeton (PCP).
- Buffhead:** The only midwinter report was 1 on 6 Feb on the Des Moines R. below Red Rock dam (SJD). The only reports of returning migrants were on 20 Feb at Terra L. (SJD), and at Davenport (PCP).
- Hooded Merganser:** 12 were at Cedar L. on 31 Dec (THK), and 4 wintered (DLD). Other January reports were of 4 on 6 Jan at Pool 19 (SJD), 1 on 6 Jan at Ft. Madison(SJD), and 1 on 30 Jan at Snyder Bend (SJD).
- Common Merganser:** Peak counts: 10,000 on 1 Dec at Saylorville Res. (SJD) and 20,000 on 14 Dec at Red Rock Res. (SJD). January-February reports included 2 on 30 Jan at Snyder Bend (SJD), 9 on 3 Feb in West Des Moines (SJD), 163 on 6 Feb along the Des Moines R. below Red Rock dam (SJD), and 320 on 19 Feb at the Lansing Power Plant (DeC), 15 on 23 Feb at Big Creek spillway (PJW), and 300 on 28 Feb at Davenport (PCP).
- Red-breasted Merganser:** A male was below Red Rock dam on 6 Jan. (SJD). On 12 Dec 3 were at Hallett's Quarry (HZ).
- Ruddy Duck:** The only report was of 1 on 6 Jan in Ottumwa (SJD).
- Turkey Vulture:** 1 was reported "feeding on a road kill" on 10 Dec near Irvington in Kossuth Co. While Turkey Vultures are occasionally reported in December, the appearance of this individual in northern Iowa is unusual (J.W. Garner fide MCK).
- Bald Eagle:** An amazing 1,188 was tallied on 1-2 Feb between Clinton and Muscatine on the Mississippi R. (PCP with Kelly McKay). Other concentrations included 106 on 6 Feb along the Des Moines R. below Red Rock dam (SJD), 25 on 20 Dec at Red Rock Res (THK), and 15 on the Des Moines R. in downtown Des Moines on 8 Feb (PJW). Away from the major rivers, several wintered in Algona, dining on dead pigs (MCK). Two were seen on 19 Jan and 23 Feb lingering near a nest site near Auburn in Sac Co. (ETH).
- Northern Harrier:** The most was 3 on 14 Dec at Belva-Deer P. in Keokuk Co (PHA, RIA).
- Sharp-shinned Hawk:** Of the five reporting locations, four indicated the presence of feeders. An ad. on 25-28 Jan at Spirit Lake ate 3 sparrows" (ETH, details), while in Algona, they were "at feeders all over town" (MCK).
- Cooper's Hawk:** All: 1 on 22 Dec in Iowa City (JLF), 1 imm. on 5 Jan at a Marshalltown feeder(MPr), 1 ad. on 8 Jan at Ledges S.P. in Boone Co. (MPr), 1 on 27 Jan in Algona (MCK), and 1 imm. on 28 Jan in Marshalltown (MPr).
- Northern Goshawk:** All: 1 on 22 Dec at Hawkeye W.A. in Johnson Co. (CE-details), 1 on 15 Jan at Mason City (CJF-details), an imm. on 28 Feb at Big M. in Butler Co. (JLF), and 1 imm. in the Cerro Gordo Co. Greenbelt from 8 to 15 Feb (MPr-details, ETH-details, MCK, RTh).
- Red-shouldered Hawk:** Not normally considered a feeder bird, the most unusual report was of an adult at a Marshalltown feeder where a "lady fed it chicken necks" (MPr). As expected, the other reports were from the eastern half of the state: an ad. on 10 Dec at George Wyth S.P. in Black Hawk Co. (SJD), 1 on 20 Feb at Chelsea in Tama Co. (MPr), and 1 on 22 Feb at Red Rock Res. (AB).
- Red-tailed Hawk:** The peak count was 9 on 14 Dec at Belva-Deer P. in Keokuk Co. (PHA, RIA).

- Ferruginous Hawk:** An imm. from 12 to at least 16 Feb northwest of Thornton in Cerro Gordo Co. was carefully studied (*CJF, *THK, *JLF, *SJD, *JJD). Assuming it is accepted by the Records Committee, it will be only the sixth accepted state record and the first from winter.
- Rough-legged Hawk:** Widely reported throughout the period, with 17 from 12 locations. The peak was 4 on 14 Dec at Belva-Deer P. in Keokuk Co. (PHA, RIA).
- Golden Eagle:** An imm. on 30 Jan at the Loess Hills W.A. in Monona Co. was the only report (SJD-details).
- Merlin:** The prairie subspecies *Falco columbarius richardsonii* birds, all females or imm., were reported on 8 Dec at Ames (SJD), 24 Dec at Buffalo in Scott Co. (SJD), and on 14 Feb at Ames (SJD, JJD). An ad. *richardsonii* was near Thornton (JSi), and a female or imm. "dark bird," (the *columbarius* subspecies?) was east of Prairie City on 7 Dec (SJD). Not identified to subspecies were birds at Algona on 6 Dec and 23 Jan (MCK), 1 on 6 Dec at Finn Pond in Greene Co. (RTh), 1 on 25 Dec near Carroll (RTh), 1 on 12 Feb in Sioux Center (JV), and 1 on 19 Jan near Pilot Knob S.P. in Hancock Co. (CJF-details).
- Prairie Falcon:** Dark axillaries were seen on the following birds: 4 Jan near Riverton W.A. (CBC, Ross Silcock-details), 2 Feb at the Spencer airport (LAS), and from 17 to 22 Feb in Cerro Gordo Co. (*RTh, AB).
- Gray Partridge:** After a long decline, comments like "up from last year," and "making a comeback" were interesting. The most reported was six flocks in Cerro Gordo Co. on 16 Feb (SJD, JJD), and the most southerly report was 8 on 25 Jan near Adel in Dallas Co. (HZ). Also reported from Sioux, Dickinson, Wright, Grundy, and Story counties.
- Ring-necked Pheasant:** While this species forms flocks in winter, one of 300 on 14 Feb in Cerro Gordo Co. was remarkable (THK).
- Ruffed Grouse:** 2 on 8 Feb at Stephens S.F. in Lucas Co. (SJD) are products of the DNR reintroduction program.
- Northern Bobwhite:** 20 on 1 Jan in western Sioux Co. were observed before the January blizzards (JV). This species is highly vulnerable to severe winters.
- American Coot:** Up to 4 wintered at Cedar L. (DLD), One wintered in Ottumwa, and 1 was at Blue L. on 30 Jan (SJD). Three at Rock Valley in mid-December dwindled to 1 in mid-January (JV, Marty Eby fide SJD).
- Killdeer:** First: 19 Feb, near Ames (Mike Meetz fide JJD), 20 Feb at Green Valley L. (SJD), and 25 Feb. in Warren Co. (AB).
- Common Snipe:** 1 was at Montrose in Lee Co. on 6 Jan (SJD).
- American Woodcock:** A winter report was referred to the Records Committee.
- Pomarine Jaeger:** 1 of 3 immatures reported in the fall lingered until 14 Dec. at Red Rock Res. (SJD, BFH).
- Franklin's Gull:** 1 on 3 Jan at Saylorville Res was in alternate plumage (SJD).
- Ring-billed Gull:** 65,000 on 7 Dec at Red Rock Res. was the peak count, 1,400 at Saylorville Res. on 5 Dec. declined to 6 on 3 Jan (SJD). One on 21 Jan at Atlantic was very unusual for mid-winter (SJD). Six on 22 Feb at Red Rock Res. were migrants (AB).
- Herring Gull:** At Red Rock Res, there were 10,000 on 7 Dec (SJD), 4,000 on 18 Dec (SJD), and all had departed by 20 Dec (THK), but 200 were there on the CBC. One on 22 Feb at Red Rock Res was a returning migrant (AB).
- Thayer's Gull:** All: 1 ad. on 13-22 Dec at Lock and Dam 15 in Scott Co. (JLF, PCP), 1 first basic on 13-22 Dec. at Lock and Dam 14 in Scott Co. (JLF, Kelly McKay fide PCP); 1 first basic on 1 Dec, 1 ad. basic on 3 Dec, and 1 ad. basic on 5 Dec at Saylorville Res. (SJD); 1 ad. basic on 7 Dec, 2 ad. basic and 2 first basic on 14 Dec., and 1 ad. basic and 1 first basic on 18 Dec at Red Rock Res. (SJD); and 1 imm. on 6 Feb at Davenport (PCP).
- Iceland Gull:** A report was referred to the Records Committee.
- Lesser Black-backed Gull:** 1 first basic on 14 Dec was at Red Rock Res, probably the same bird documented there in late November (SJD). One ad. basic was at Red Rock Res. on 18 Dec (SJD), and a 4th basic was in Ottumwa on 6 Jan (*SJD).
- Glaucous Gull:** All: 1 first basic on 4 Dec at Runnells W.A., Marion Co.; 2 first basic on 7 Dec, 6 first basic on 18 Dec, and 2 first basic on 21 Dec at Red Rock Res (SJD); 1 first basic on 8 Dec at Saylorville (SJD), and 1 first basic on 6 Jan at Pool 19 (SJD).
- Great Black-backed Gull:** All: 1 ad. on 3 Feb. at Bettendorf (PCP).
- Eastern Screech-Owl:** 1 occupied a Wood Duck house in Spirit Lake (Eth).
- Snowy Owl:** Cerro Gordo and Dickinson counties each had two birds; counties with one bird included Clay, Emmet, Humboldt, Johnson, Kossuth, Lyon, and Palo Alto. A banner year, at least compared to last winter's four birds.
- Great Gray Owl:** In a remarkable repeat of last year's performance, birds again appeared in the state. Two were found on 9 Feb at Clay Banks Forest in Cerro Gordo Co. (RIA-photo, *PHA, *CJF-photo

- *JLF, *SJD). At least 1 remained in the area through the season. These are the sixth and seventh records for the state; the previous records are 1 in 1974 and 4 in 1996.
- Long-eared Owl:** All: 3 on 1 Jan near Luther in Boone Co (HZ), 1 or 2 on 19 Jan at Wolf Creek P. in Grundy Co. (MPR), 4 on 23 Jan at Croton in Lee Co. (JLF), and 1 through the season at Swan L. in Carroll Co. (RTh).
- Short-eared Owl:** All: 1 on 8 Dec at L. Pahoja in Lyon Co. (DCH), 1 on 25 Dec in Marshall Co. (MPR), 1 on 16 Jan at Bob Pyle M. in Story Co. (SJD), 2 on 31 Jan in Iowa Co. (JLF), and 1 from 20 Dec to 23 Feb in Carroll Co (RTh).
- Northern Saw-whet Owl:** All: 1 Jan in Boone Co. (HZ, SJD), 18-19 Jan in Johnson Co. (CE, JLF), 19 Jan in Grundy Co. (MPR), 29 Jan in Jasper Co. (MPR), 31 Jan-1 Feb in Iowa Co. (JLF), and 14 Feb in Cerro Gordo Co. (CJF). Saw-whet Owl-finding expert Steve Dinsmore reported only 1 for the season.
- Belted Kingfisher:** The only report was of 3 below Red Rock dam on 6 Feb (SJD); 16 were at this location 1 year ago.
- Yellow-bellied Sapsucker:** All: 1 on 3 Dec in Polk Co. (SJD), and 1 on 18 Feb at Brookside P. in Ames (Jane Schuster fide JJD). The third report was from Monona Co. (RTh).
- Northern Flicker:** A "red-shafted" form was near Carroll (RTh).
- Pileated Woodpecker:** Reports from central and north-central Iowa included 1 at Lime Creek Nature Center in Cerro Gordo Co. (Fred Heinz fide CJF) and 1 on 24 Feb in Boone Co. (John Schmitz fide JJD). Other reports were from Allamakee, Lucas, Polk, and Tama counties.
- Horned Lark:** The peak was 2,000 on 14 Feb in Floyd and Cerro Gordo counties (THK).
- Pinyon Jay:** Iowa's second record, an immature hosted by Gaylan and Lloyd Crim, appeared on 30 Nov ne. of Boone in Boone Co. (*SJD, *CE, *JLF, *THK-photo) and remained until 22 Mar (JJD fide L. Crim).
- Clark's Nutcracker:** Corvid invasion years often produce more than one accidental species, and this winter was no exception. Iowa's 6th Clark's Nutcracker appeared near Pony Creek P. in Mills Co. and remained from about 15 Dec to 28 Dec (*THK-photo, *JLF, RIA photo, *BFH-photo, *PCP, *SJD, see front cover). Two of the previous reports were from 1972, the others prior to 1920.
- American Crow:** The City of Newton's first Crow Day attracted little interest among humans, but 100,000 crows showed up according to the Des Moines Register (19 Jan 1997). If correct, this would be the highest count ever for the state. It remains to be determined whether this estimate was liberal or conservative.
- Red-breasted Nuthatch:** The most reported were 4 at Hickory Grove P. in Story Co. (HZ). Only about 6 other birds at four locations were noted.
- Carolina Wren:** On 21 Dec, 18 were found from Keokuk to Montrose (SJD), and 5 were at Burlington (JLF). The only report away from southeastern Iowa was 1 on 22 Jan at Pellett W.R. in Cass Co. which survived a night of -22 (SJD).
- Winter Wren:** The only reports after the CBC period were of 1 on 6 Jan near Montrose in Lee Co. (SJD), and 1 on 23 Jan in Burlington (JLF).
- Sedge Wren:** 1 was found on 6 Dec at L. Panorama in Guthrie Co. (*SJD). Iowa's four winter records have all been in December.
- Golden-crowned Kinglet:** The only reports after the CBC period involved from 1 to 3 birds from 19 to 28 Jan at Stephens S.F. in Lucas Co. (AB, JSi).
- Ruby-crowned Kinglet:** Both reports of this rare winter species came from CBCs: 3 on 4 Jan in Shenandoah (*Larry Falk) and 2 on 4 Jan at Mockridge W.A. in Clinton Co. (*Kelly McKay).
- Eastern Bluebird:** There were 4 reports of 8 birds, all in southern Iowa.
- Townsend's Solitaire:** All: 1 on 3 Dec at Storm Lake (Mike Schwitters visiting from Montana fide THK), 1 on 21 Dec near Cherokee (CBC, Dick Bierman-details), 1 on 31 Jan at Waterman Creek W.A. in O'Brien Co. (SJD-details), 1 on 16 Feb near Des Moines (BE), and 1 on 23 Feb near Washta in Cherokee Co. (*RT, PE).
- Hermit Thrush:** All: 1 on 1 Dec at Marble L. in Dickinson Co. (ETH).
- American Robin:** High counts: 63 on 30 Jan at Badger L. (SJD) and 26 in Cherokee Co on 2 Feb (PE).
- Varied Thrush:** All: a male, or possibly 2, in the Algona area from Thanksgiving to 28 Dec (MCK, Nick Scholer fide MCK) and 1 from 1 to 11 Jan near Perry (RIA-photo, PHA, MPR).
- Gray Catbird:** One was found on 21 Dec on the Ames CBC (Wolfgang Oesterreich-photo). Since 1960, there are 21 reports from the CBC period.
- Brown Thrasher:** 1 was at L. Meyer County P. in Winneshiek Co. on 6 Dec (Larry Reis fide DeC).
- Cedar Waxwing:** 250 on 2 Feb in Cherokee Co was the only report (PE).
- Northern Shrike:** Another good year after last year's excellent showing. Sixteen were found in 16 locations, almost all in the northern third of the state. The first of the winter season was 1 on 1 Dec in Boone Co. (SJD), and by far the most southerly was 1 on 9 Jan in southern Ringgold Co. near

the Missouri border (SJD). Interesting were three "yard" reports from Dickinson Co. (LAS, L Wallace fide LAS, ETH). These birds may have been seeking prey around feeders.

Cape May Warbler: The state's first winter record was a female in Indianola on 15 Dec (SJD-photo). Early winter records of this species are not unprecedented in the Midwest.

Yellow-rumped Warbler: Of 3 on 21 Dec at Sacred Heart Cemetery on the Burlington CBC, 1 was still present on 19 Jan. Only 2 others were found after the CBC period: 1 on 15 Jan at Rock Falls Greenbelt which was well north of its expected wintering range (CJF-details) and 1 on 8 Feb at Stephens S.F. in Lucas Co. (JSi, SJD).

Palm Warbler: 1 was in Boone Co. on 6, 9 Dec (*SJD, K. Jungbluth fide SJD)[record latest].

Eastern Towhee: 2 were found on 21 Dec on the Ida Grove CBC (PE fide SJD).

Spotted Towhee: All: 1 on 30 Dec at Riverton W.A. (SJD), 1 on 31 Dec in Cerro Gordo Co. (JLF), and 1 from 25 Dec through the end of February in Ames (Jim Pease-photo, fide JJD).

American Tree Sparrow: "Disappeared from Sioux City for most of December and January" (JV).

Chipping Sparrow: Unexpected was 1 in Mason City from 16 Dec to 1 Feb, and more unexpected was the second bird that showed up on 2 Feb (CJF-details).

Field Sparrow: The two winter reports were both from 20 Dec: near Newell in Buena Vista Co. (ETH-details) and at L. Panorama (CBC, *Ray Cummins).

Vesper Sparrow: 1 was found on 20 Dec n. of Lakin St. (CBC *Bob Myers) and the other was in Marshall Co. on 1 Jan (MPr). This species rarely lingers past the CBC period.

Lark Sparrow: A brief report has been referred to the Records Committee.

Savannah Sparrow: 1 was at Trautman Res., Marshall Co. on 29 Dec (RIA-photo, PHA)[ties second latest].

Fox Sparrow: 1 was at Davenport on 4 Feb (PCP).

Song Sparrow: 1 that wintered in Mason City was considered unusual (CJF).

White-crowned Sparrow: 2 were at Hawkeye W.A. from 18 Jan to 2 Feb (DLD, CE), and 2 more were at Amana Woods in Iowa Co. on 9 Feb (CE).

Harris's Sparrow: Conspicuous and having an affinity for feeders, this species tends to be well reported when present. This season, it was reported from 11 locations. Unusual was 1 through December and January in Winneshiek Co, well east of its usual wintering range (Larry Reis fide DeC). The peak count was 19 at a thistle-seed feeder in Cass Co. (MAP); other counts of multiple birds were 12 through the period in Story Co. (HZ), 6 through the period in Ida Co. (PE), 5 on 8 Jan in Dallas Co. (MPr), 2 on 8 Dec in Story Co. (CE), and 2 on 1 Jan in Marshall Co. (MPr).

Dark-eyed Junco: 1 "Oregon" was northeast of Marshalltown from 27 Dec to 5 Jan (MPr).

Lapland Longspur: Two early February reports dwarfed all others: 2,600 in two flocks in Carroll Co. on 3 Feb (RTh), and 1,500 in Sac Co. on 2 Feb (PE). The only other flocks exceeding 100 birds were 300 on 14 Feb in Cass Co. (RCe), 200 on 3 Dec in Johnson Co (THK), and 150 on 5 Jan near Decorah (PC).

Snow Bunting: It was an exceptional year for this species, probably a function of heavy northern snows driving birds south, and snow cover in northern Iowa forcing birds to roadsides where they could be more easily observed. Assuming my knowledge of Iowa geography serves me correctly, all reports came from counties bordering or north of I-80. High counts included 1,500 on 14 Feb in Floyd and Cerro Gordo counties, 800 on 31 Dec at Coralville Res. (THK), 800 on 23 Jan in Kossuth Co. (MCK), 500 on 6 Dec in Hardin and Grundy counties. (THK), 300 on 16 Feb in Polk Co. (PJW), 300 on 5 Jan near Decorah (PCP), 200+ in January in Sioux Co. (JV), flocks of 100 to 400 in Carroll Co. (RTh), 180 in Monona Co (FL), and 150 on 11 Feb in Hardin Co. (MPr). Several others reported numerous smaller flocks.

Red-winged Blackbird: The only wintering groups were 500 on 15 Jan in Ringgold Co in southern Iowa (SJD) and, more significantly, 20 in 31 Jan in Cherokee Co in northwestern Iowa (SJD). Dinsmore also reported the first territorial birds and migrants in Polk Co. on 20 Feb. Numerous migrants were observed during the end of February.

Meadowlark species: Scattered individuals and small flocks were reported from western Iowa. The most northerly was 1 through January at Sioux Center (JV).

Rusty Blackbird: January and February reports included 4 on 1 Jan at Rock Valley in northwestern Iowa (JV), 40 on 8 Feb in Lucas Co. (SJD, JSi), and 45 on 28 Feb in Warren Co. (AB).



Fig. 1. Spotted Towhee, Ames, 25 December 1996. Photo by James Pease.

- Great-tailed Grackle:** 134 at Bartlett in Fremont Co. is not only an unprecedented concentration for Iowa, but it is also a record late date (SJD). Some overwintered (Ross Silcock fide SJD).
- Brown-headed Cowbird:** There were three reports of 1 to 12 birds in central Iowa and 1 in northern Iowa at Mason City on 23 Jan.
- Northern Oriole:** 1 remained through 17 Dec in Iowa City (Nancy Lynch fide THK, see Fall Report).
- Pine Grosbeak:** A CBC report was referred to the Records Committee.
- Purple Finch:** None were reported after the CBC period.
- House Finch:** The few reports presumably reflected its abundance rather than its scarcity.
- Red Crossbill:** All: 19 on 15 Dec at Hooper Game A. in Warren Co. (SJD), up to 13 from mid-Nov to 23 Feb at a feeder in NW Ames (Shelly Coldiron fide SJD, CE, MPr), up to 13 in Jan and Feb at a feeder in NE Ames (HZ), 3 on 11 Jan in Ames (Steve Maloy fide JJD), and 2 on 26-27 Jan in Winneshiek Co. (Lindsay Lee fide DeC).
- Common Redpoll:** All: 2 on 21 Dec in Carroll (ETh), and 1 from 30 Nov through the season in Ames (Shelly Coldiron fide SJD, JLF).
- Pine Siskin:** Virtually nonexistent. The only reports outside of CBCs were 2 on 10 Dec at Spirit Lake (ETh) and "a few" in November to early January, then 1 on 31 Dec to mid-Jan and 5 on 5 Feb in Sioux Co. (JV).
- Evening Grosbeak:** The only report was 1 on 27 Dec through 17 Jan north of Marshalltown (RIA-photo, PHA, JLF, CE, MPr).
- Eurasian Tree Sparrow:** 24 on 23 Jan at the usual location n. of Burlington (JLF).

COMMENT

When I agreed to take over the winter field reports, I had no idea what a huge job it was, and it has given me a great new appreciation of all the field reports editors, but especially of my predecessor, Ross Silcock. Not only did he put together the CBC reports for both *Iowa Bird Life* and *American Birds/Audubon Field Notes*, he then went back to his desk and did the winter field reports, all under tight deadlines. His years of hard work and study brought to *Iowa Bird Life* readers an insight into our winter avifauna that will be greatly missed and difficult to duplicate.

CONTRIBUTORS

Pam H. Allen (PHA), West Des Moines; Reid I. Allen (RIA), West Des Moines; Aaron Brees (AB), Indianola; Dennis Carter (DeC), Decorah; Robert Cecil (RCe); David L. Dankert (DLD), Cedar Rapids; Chris Edwards (CE), North Liberty; Bery Engebretsen (BE), Des Moines; Peter Ernzen (PE), Ida Grove; Carolyn J. Fischer (CJF), Mason City; James L. Fuller (JLF), Iowa City; Douglas C. Harr (DCH), Larchwood; Bill F. Huser, (BFH), S. Sioux City, NE; Matthew C. Kenne (MCK), Algona; Thomas H. Kent (THK), Iowa City; Fred Leshner (FL), La Crosse WI; Marietta A. Petersen (MAP); Peter C. Petersen (PCP), Davenport; Mark Proescholdt (MPr); Lee A. Schoenewe (LAS), Spencer; Jim Sinclair (JSi), Indianola; Ed Thelen (ETh), Spirit Lake; Rob Thelen (RTh), Carroll; John Van Dyk (JV), Sioux Center; Phil J. Walsh (PJW), Des Moines; Gerald White (GW), Muscatine; Hank Zaletel (HZ), Nevada.

1315 41st Street, Des Moines, IA 50311

SNOWY PLOVER AT SAYLORVILLE RESERVOIR

STEPHEN J. DINSMORE

On 3 May 1996, I saw a Snowy Plover at the Oak Grove Beach Recreation Area of Saylorville Reservoir in Polk County. I studied and photographed the bird at distances as close as 20 m between 10:00-10:21 a.m. When I arrived at the beach, I noted a distant pale shorebird near the water which I thought was probably a Piping Plover. I left the bird for a couple of minutes to look at some Sanderlings, after which I couldn't immediately relocate the bird. Several minutes later, I found the bird high up on the beach. As soon as I put the scope on the bird, I recognized it as a Snowy Plover (Fig. 1). Overall, the bird was very pale. The upperparts were a pale, sandy brown. When viewed from behind, the bird had a narrow white collar and the crown appeared buffy and contrasted with the mantle. The underparts were white. The forehead was white with a small black patch on the forecrown. The bird also had a small black auricular patch and a black "slash" mark on each shoulder. The bill was very thin, black, and had a slight upturned appearance. The legs were grayish, and the bird seemed long-legged for its size. Throughout the observation, the bird's upright posture and very active foraging behavior were distinct. Based on the brightness of the plumage and black head markings, I sexed the bird as an adult male. Other birders did not relocate the bird later in the day.



Fig. 1. Snowy Plover, Saylorville Reservoir, 3 May 1996. Photo by Stephen J. Dinsmore.

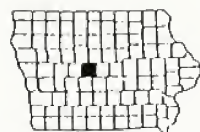
This is the fifth record of a Snowy Plover for Iowa. Previous records are all from spring: 6-7 May 1988 at Bays Branch Wildlife Area, Guthrie County (Dinsmore and Fix, *Iowa Bird Life* 58:86-87, 1988), 22 May 1988 at Dunbar Slough, Greene County (Dinsmore and Fix, *Iowa Bird Life* 58:86-87, 1988), 28 April 1990 near Burlington, Des Moines County (*Iowa Bird Life* 62:21), and 10-13 May 1992 at Riverton Wildlife Area, Fremont County (*Iowa Bird Life* 62:76, two birds).

4024 Arkansas Dr. Ames, IA 50014

PINYON JAY IN BOONE COUNTY

LLOYD AND GAYLAN CRIM

At 7:45 a.m. on 30 November 1996, while watching a flock of Blue Jays at our bird feeder, we noticed one "odd" bird. After checking the bird book, we decided it was a Pinyon Jay. We then called Jim Dinsmore who came to see it. After he arrived, all three of us were able to observe it returning to the bird feeder three times in the next several hours.



The bird was roughly the size of a Blue Jay, with a shorter tail and a longer, thinner, slightly curved beak (Fig 1.). In color, it was mostly gray with some light bluish-gray color on the head, tail, and edges of the wings. It had a white throat patch, but lacked the streaking an adult should have, and was labeled a juvenile by some of the many visitors who came to see it. It walked rather than hopped, and mingled with the Blue Jays as one of them. Its visits to our feeders were fairly

regular at first, becoming more erratic as the season progressed and the snow melted. It seemed to prefer the peanuts, but occasionally took sunflower hearts, even hanging from a "super ball" feeder to do so. It was last observed on 22 March 1997.



Figure 1. Pinyon Jay in Boone County, 6 December 1996. Photograph by Thomas H. Kent.

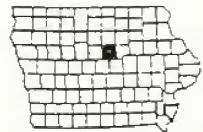
This is only the second report of this western species in Iowa, the previous report being one seen at Shenandoah from December 1972 to January 1973 (Zollars, *Iowa Bird Life* 43:28-29, 1973). To our knowledge, this is the furthest east report of this species.

1750 140th St., Boone, IA. 50036

MACGILLIVRAY'S WARBLER IN HARDIN COUNTY

MARK PROESCHOLDT

On 2 June 1995, I stopped at Eagle City County Park along the Iowa River Greenbelt in north Hardin County. I heard a loud unfamiliar warbler song in a brushy tangle along the park's edge. There were several birds in the tangle. I heard one or two loud "chip" notes then zeroed in on the area of the chips. Then a warbler popped out into view about eight feet up in the tangle. It looked like a breeding-plumaged male Mourning Warbler. It was yellow underneath, had a dark green back, and a dark gray hood with a definite black smudge on its upper breast. It was blackish around its eye area. But it had very vivid white eye crescents above and below its eye like a breeding-plumaged Franklin's Gull would have. I had a very good look at it for approximately five seconds, and it was a broken white eye-ring that was incomplete both in front of and behind the eye. I was very surprised! The bird moved, and I did not see it again. The unfamiliar song continued, but I was unable to find the singing bird. Then lack of additional time forced me to leave. Although I had only a brief view of the bird, the presence of the incomplete eye ring made it clear that this was a MacGillivray's Warbler, a western species that otherwise might be confused with a Mourning or Connecticut warbler. This is the first accepted record for Iowa of a MacGillivray's Warbler.

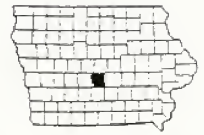


Box 65, Liscomb Iowa 50148

ANOTHER MEW GULL AT SAYLORVILLE RESERVOIR

STEPHEN J. DINSMORE

On 29 November 1996, I observed an adult Mew Gull above the dam of Saylorville Reservoir in Polk County. I watched the bird from 4:03 to 4:41 p.m. as it rested on the ice with Ring-billed and Herring gulls. I was watching the gulls coming in to roost for the evening when I noticed a darker-mantled gull resting with several Ring-billed Gulls. The bird was preening, and I had to watch it for several minutes to be sure the dark-mantled appearance was not due to lighting. The bird was essentially the same size as a Ring-billed Gull, although it appeared slimmer. The mantle and upperwings were a shade darker gray, roughly the shade of those of a California Gull. The head was white with some light brown streaking on the nape and a few gray/brown flecks on the forehead. The eye was dark and stood out on the pale face. The bill was shorter and thinner than that of a Ring-billed Gull and was entirely yellow. The bill also had a more pointed appearance than the bill of a Ring-billed Gull. The small bill, seemingly large eye, and rounded head shape gave the bird a dainty appearance. The underparts and tail were white. Since the bird perched throughout the observation, the only glimpse I had of the wingtip was when the bird preened. When perched, the primaries were black with small white spots at the tips. On the spread wing, there was a large subterminal mirror on the outer primary (P10) and a slightly smaller subterminal mirror on the next primary (P9). The next several primaries had smaller white terminal spots and a small amount of black color separating the white from the dark gray upperwing. There was a broad white trailing edge to the upperwing. The underwing pattern was not studied. The wing, tail, and bill patterns indicate the bird was an adult in basic (third-basic) plumage. The lack of a subterminal ring on the bill and amount of white on the upperwing indicate the bird was of the expected North American race *Larus canus brachyrhynchus*.



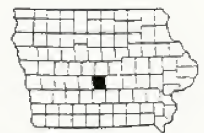
This is the fifth record of a Mew Gull in Iowa. Previous records were summarized by Dinsmore (*Iowa Bird Life* 65: 103-104, 1995) and included two first-basic, one second-basic, and one adult-basic bird. All of the Iowa records have occurred from late November through late December.

4024 Arkansas Dr. Ames, IA 50014

LITTLE GULL AT SAYLORVILLE RESERVOIR

STEPHEN J. DINSMORE

On 27 October 1988 I was birding the north end of Saylorville Reservoir in Polk County. At 3:30 p.m. I noticed a "different" gull feeding with several hundred Bonaparte's Gulls off Jester Park. At first I thought it was a Black-legged Kittiwake because of the black wing bar. However, the bird was much too small for a kittiwake. The bird was actively foraging over a large area of the lake and was difficult to approach. Finally, at about 4:15 p.m., I got within 200 yards of the bird. The bird was roughly the size of a Bonaparte's Gull. There was a prominent black bar across the back of each wing, extending from the base to the bend in the wing, then outwards to include the outer primaries. The rest of the upperwing and



mantle were white. The tail was square-tipped and white with a narrow black terminal band. The underwing and underparts were white. The head was white with a black spot behind the eye. The bill was short, slender, and dark. Leg color was not seen. Later, I noted that, in flight, the bird lacked the white "window" on the inner primaries and the dark trailing edge to the wing, features that all of the immature Bonaparte's Gulls had. Nowhere in my notes did I describe a dark cap on this bird. I don't recall seeing one, but that may have been because I saw the bird mostly in flight. Based on these features, I concluded the bird was a Little Gull in first-basic plumage. The wing pattern eliminated first-basic Bonaparte's Gull. First-basic Ross's Gull, not considered seriously at the time of the sighting, was eliminated by tail shape.

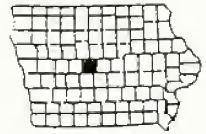
This bird was seen again on 1 November 1988 by Ann Johnson of Norwalk. This represents the first record of a Little Gull for Iowa. There have been four subsequent records of Little Gulls in Iowa. Those records are from April (2), October (2), and November (1).

4024 Arkansas Dr. Ames, IA 50014

WILSON'S PHALAROPE NEST IN BOONE COUNTY

JAMES J. DINSMORE AND WILLIAM SCHUSTER

On 31 May 1996, while surveying wetland birds at the Harrier Marsh complex south of Ogden in Boone County, we flushed a male Wilson's Phalarope from a nest. The nest was on top of a small mound of vegetation amongst some short vegetation along a small marsh in the center portion of the complex. The nest contained four heavily marked dark brown eggs. We quickly left the nest and watched the male as it circled over the area and eventually landed near the nest. On our next visit to the area on 4 June, we could find no sign of the nest or the phalarope. On 8 June, Dinsmore searched the area thoroughly but could not find any sign of the nest nor was the adult seen. We assume that the eggs were taken by a predator.



On 19 June 1996, Dinsmore flushed a female Wilson's Phalarope from a recently seeded grassy field about 150 yards to the northwest of where the earlier nest was found. From about 7:15 to 7:45 a.m., the female circled over him, calling, and circled low over one section of the field. Dinsmore carefully searched this area but was not able to locate a nest although almost certainly, one was present. Presumably this female was the mate of the male seen earlier.

Although the Wilson's Phalarope was once a common nesting species of Iowa's wetlands, there have been few nesting records in recent years. The only recent specific nesting reports we are aware of were all in northern Iowa (*Birds in Iowa*, Kent and Dinsmore, 1996). This is the first confirmed report of nesting in central Iowa although this species undoubtedly nested in the area prior to settlement.

4024 Arkansas Dr., Ames, IA 50014 and 204 Oak Blvd., #107, Huxley, IA 50124

I.O.U. BUSINESS

TREASURERS REPORT--1996, JIM SCHEIB, TREASURER

BALANCE SHEET FOR THE YEAR ENDED 31 DECEMBER 1996.

CURRENT ASSETS

Cash in bank (Note 1)	22,105.05	
Cash in bank, (Note 2)	204.74	
Certif. of Deposit (Note 3)	26,270.72	
Certif. of Deposit (Note 4)	3,766.89	
Total Current Assets, 31 Dec. 1996		\$52,347.40

FUND BALANCE BREAKDOWN

Birdathon (Note 5)	1,512.05	
Book royalties	2,865.34	
Endowment Fund (Note 5)	4,915.39	
Project Fund (Note 5)	390.71	
Endowment Fund Total		9,683.49
Life Memberships	7,852.50	
Birdline Fund	250.30	
Meeting Reimbursement Fund	1,661.29	
Breeding Bird Atlas	-156.26	
Adopt-A-Book Fund	631.00	
Subtotal		10,238.83
General Operating Fund		32,425.08

Total Fund Balance, 31 December 1996 \$52,347.40

Note 1. Norwest Bank, Cedar Rapids, Iowa (checking account)

Note 2. First National Bank, Ames, Iowa (IBL account).

Note 3. Twelve-month Certificate of Deposit, maturing June 26, 1997.

Note 4. Three-month Certificate of Deposit, maturing March 26, 1997.

Note 5. All Birdathon funds collected are allocated as follows: 75% to the Endowment Fund and 25% to the Project Fund.

STATEMENT OF SUPPORT, REVENUES, AND EXPENSES FOR THE PERIOD 1 JANUARY TO 31 DECEMBER 1996

SUPPORT AND REVENUES

SUPPORT (Contributions and Gifts)

Breeding Bird Atlas	34.50	
Adopt-A-Book Fund	345.00	
Iowa Bird Line	135.00	
Unspecified contributions	670.00	
Endowment Fund	50.00	
In Memory of Howard Young	50.00	
Total contributions and gifts		1,284.50

REVENUES (members est. for 1996 year)

Membership/Subscriptions

Regular member	4,035.00
First family member	1,080.00
Second family member	280.00
Third+ member	22.00
Life member	450.00
Institutional subscribers	315.00

Total membership revenue (Note 1) 6,182.00

Sales

I.O.U. materials	157.00
Educational Booklets	16.50
Iowa Bird Life back issues	104.32

Total Sales Revenue 277.82

Royalties 6.00

Spring and Fall IOU Meetings 335.18

Unspecified 446.24

Interest Income

Checking account	235.78
Certificate #1 (Note 2)	98.29
Certificate #2 (Note 3)	1,182.07

Total Interest Income 1,516.14

TOTAL SUPPORT AND REVENUES \$10,047.88

EXPENSES

Publications Committee

Iowa Bird Life	2,920.96
I.O.U. News	1,962.61

Total Publications Committee 4,883.57

Breeding Bird Atlas 1,155.00

Education Committee 4.50

Iowa Bird Line (Note 4) 196.42

Records Committee 383.10

Materials Expense (Note 5) 738.00

Winter Feeder Survey (Note 6) 0.00

Treasurer (Note 7) 799.65

Total other organization expenses 3,276.67

TOTAL EXPENSES \$8,160.24

EXCESS SUPPORT AND REVENUES OVER EXPENSES \$1,887.64

Note 1. Membership revenue recorded in 1996 includes dues paid only in FY 1996.

Note 2. Three-month Certificate of Deposit, maturing 26 March 1997.

Note 3. Twelve-month Certificate of Deposit, maturing 26 June 1997.

Note 4. Check for \$250 reimbursing Jim Fuller not cashed.

Note 5. A new version of the checklist was printed in the amount of 2,750.

Note 6. Check for \$800 for data entry not cashed.

Note 7. Includes \$302 for envelopes. New envelopes for dues and correspondence were printed for the next two years.

BOOK REVIEW

Birds in Iowa by Thomas H. Kent and James J. Dinsmore. Privately published, Iowa City and Ames, 1996. 391 pp., hardbound, \$30. *Birds in Iowa* is a completely new approach to presentation of data on Iowa's birds. Kent and Dinsmore were two of the five co-authors of the predecessor *Iowa Birds*, published in 1984, but there is no resemblance between the new book and the earlier publication.

While I consider *Birds in Iowa* a major advance in the now computer-aided evolution of the art of reducing a mountain of data to a clear, concise, and readable format, I believe its major strength is not the obviously diligent and dogged effort put forth in this achievement, but simply the fact that the book was published by the authors. In doing so, they were beholden to no one but themselves and perhaps the many birders who accumulated the raw data rather than the often-conflicting agendas of various sponsors and publishers. Such agendas can easily cause a loss of focus on the stated or implied purpose of a publication, a result avoided in *Birds in Iowa*. Kent and Dinsmore clearly state their purpose and emphasize it by placing it at the very beginning of the book: "The purpose of this book is to describe the distribution and frequency of wild birds that have been accepted as occurring in Iowa". The authors have succeeded admirably. At a glance, through the use of bar graphs, maps, brief summaries of early and late dates of occurrence, and a listing of records of accidental species, the reader can quickly ascertain the distribution and frequency of any species included.

The title of the first chapter, The State List, indicates the importance attached by the authors to the fact that the list of species is based on those accepted by the Records Committee of the Iowa Ornithologists' Union through 1995. Indeed, Kent has been Secretary of the Records Committee almost continuously since 1980. Included is an historical outline of the growth of the state list, followed by an innovative listing of Potential Species for Iowa, those which, while not currently on the state list, may sooner or later be so. Birders debate such topics endlessly, and it will be of no small interest to see if, and in what order, these species are recorded in Iowa.

Well-written, somewhat standard "bird book" chapters follow on Geography and Birding Areas and a History of Iowa Ornithology. Both contain well-researched information of interest, although it should be noted here, as pointed out by the authors also, that the former chapter only in a general way indicates major birding sites in Iowa. Next, the bulk of the book, is the chapter containing Species Accounts, dealt with in more detail below.

The book ends with three Appendices, a list of Literature Cited, containing general references used throughout the book, and an Index to Species Accounts. The first appendix summarizes information on Selected Other Species Reported in Iowa, an interesting discussion of certain species not on the state list but for which there are probable records or for which significant literature exists. Included are species which would be considered Hypothetical by some authors, and others which have been released or have escaped but are not yet established in the wild. The second appendix simply lists species on the state list not yet represented by a specimen, and the third appendix is a rather interesting chronological list of species by year in which their occurrence in Iowa was first documented. First, in 1804, was Least Tern!

Back to the Species Accounts. These are in general excellent. They are brief, concise, and loaded with information. A strong point is the presentation of most of the data, primarily temporal, in a "data box" (my term); this allows a quick check by

the reader of the status of any species. In its simplest form, the data box contains only a bar graph of standard format, the two axes representing time of year and relative abundance. The most complex data boxes are those of casually-occurring species for which there is a significant amount of temporal data. For these species, instead of a bar graph, the data box may contain separate graphic summaries of occurrence by year and also by month, as well as the (usually three) earliest and latest dates of occurrence for spring and/or fall. If I have any criticism of the data box system, it is that the numbers and symbols used in the graphic summaries tend to be crowded and a little confusing at first glance, especially when coupled with four columns each containing three occurrence dates. With a little patience, however, the reader can gain a lot of information in a short time without having to wade through text. I especially like the listing within the data box of all Accepted records for species of Accidental occurrence; many state books give these records in the text, or may not clearly indicate them at all.

Following the data box, each Species Account contains a brief textual account in three parts, Occurrence, Comment, and References, supplemented for many species by clear and uncluttered maps which vary in their depiction from nesting distribution to winter range.

Occurrence includes a miscellany of information of interest, varying by species, dealing with seasonal occurrence, significant high counts, movements, specific records, the existence of additional Not Accepted records (thankfully a minimum, as the reader is referred to *Iowa Birds* for these), and so on. When pertinent, data from Christmas Bird Counts, Breeding Bird Surveys, and other sources are included. These accounts are useful, and in most cases provide spatial distribution information not included in the data box or a map. A problem I had, however, was finding information on, for example, summer occurrence. I had to search through the text for this information, a situation that might have been avoided by using seasonal subheadings such as Summer. Also, little detail is provided about habitats. A birder looking for a specific species must be "at the right place at the right time", and this book does an excellent job of providing this information, except that "place" would be better defined by a comment about habitat specific to Iowa. The preferred habitat of a species varies in detail throughout its range; a birder from Florida might be unsure which vegetation types and landscapes to check in Iowa.

Comment provides a summary of species' wider distribution in relation to Iowa, and the authors include useful information from surrounding states which clarifies or can be used to predict likely movement in Iowa.

Reference lists the (usually few) citations contained within the species account, as opposed to general references used throughout the book and included at the rear under Literature Cited. I like the Reference section for its ease of use, avoiding flipping to the rear and searching through a lengthy bibliography.

A few additional comments. I found few typographical errors, and, without checking extensively, no misstatements of fact that I recognized, a testament to the authors in dealing with so much data. The choice of the authors to publish this book themselves resulted in a well-bound hard-cover product at an affordable price. There are no color pictures, which helps in pricing of course, but I would not have bought the book as a source of art. There are no other pictures or drawings, except for an excellent cover rendition of Iowa's state bird, the American Goldfinch, by Paul Hertzell. The end papers contain four clear maps of Iowa showing cities with over 10,000 population, major waterways, natural regions, and counties of the state, the latter divided into nine regions.

To summarize, I found this book a well-written, clearly laid out distillation, documentation, and presentation of the current state of knowledge of Iowa's birds. As is the goal of an important reference work, the information the book contains can be found rapidly and with ease. I recommend it without reservation; indeed, as a resident of Iowa I am proud that my state is represented by this outstanding new book.

W. Ross Silcock, Box 300, Tabor, IA 51653

FIFTY YEARS AGO IN IOWA BIRD LIFE

This thin issue starts out with articles on Herring Gulls and nesting Song Sparrows by long-time I.O.U. members James Hodges and Mrs. W. C. DeLong, both of whom are still members. A short note by editor Fred Pierce describes the dedication of a plaque in memory of the Passenger Pigeon at Wyalusing State Park near Prairie du Chien, Wisconsin. Sponsored by the Wisconsin Society for Ornithology, the plaque overlooks the Mississippi River and laments the loss of this once incredibly abundant species. The W.S.O. is planning a 50-year celebration of the dedication this year. The I.O.U. annual meeting held at Cedar Falls had 137 people registered and the bird list totalled 137 species, quite a list considering the differences in transportation in those days. Among the short notes, one described a Pine Grosbeak in Mt. Pleasant and another discussed the northward extension of the range of the Tufted Titmouse in Allamakee County.--ed.





The IOWA ORNITHOLOGISTS' UNION, founded in 1923, encourages interest in the identification, study, and protection of birds in Iowa and seeks to unite those who have these interests in common. *Iowa Bird Life* and *I.O.U. News* are quarterly publications of the Union.

EDITORIAL STAFF

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James J. Dinsmore, Summer Field Reports Editor, 4024 Arkansas Dr., Ames, IA 50014
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Thomas H. Kent, Spring and Fall Field Reports Editor, 211 Richards St., Iowa City, IA 52246
Peter C. Petersen, Spring Bird Count Editor, 235 McClellan Blvd., Davenport, IA 52803

SUBSCRIPTION/MEMBERSHIP INFORMATION

Institutions may subscribe to *Iowa Bird Life* for \$15 per year. Individuals may join the Iowa Ornithologists' Union according to the following membership classes: Regular (\$15); Regular as spouse or minor child of another Regular member without publications (\$4 first additional family member, \$2 each additional family member); Contributing (\$15 plus any additional tax-deductible contribution to the I.O.U.); and Life (\$300 as single payment or \$75 for each of four years). Members will also receive the quarterly *I.O.U. News* and are eligible to vote and hold office in the Union. Send subscriptions, membership payments, or address changes to Jim Scheib, 10 Longview Knoll, Iowa City, IA 52240

INSTRUCTIONS TO AUTHORS

Original manuscripts, notes, letters (indicate if for publication), editorials, and other materials relating to birds and bird finding in Iowa should be sent to the editor. Accepted manuscripts will generally be published promptly, depending on space available, with the following absolute deadlines: 15 November for the Winter issue; 15 February for the Spring issue; 15 May for the Summer issue; and 15 July for the Fall issue. Most manuscripts will be refereed. All material should be typed double-spaced or hand printed in ink on 8 1/2 by 11 inch paper. Authors should pattern their style after a current issue of the journal. If you want more detailed guidelines or advice regarding the appropriateness of your topic for *Iowa Bird Life*, send a self-addressed stamped envelope to the editor. Manuscripts may also be submitted on computer disk (Word 4.0 for Macintosh or compatible programs). Please submit one printed copy of the manuscript with the disk.

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UPCOMING MEETINGS OF IOWA ORNITHOLOGISTS' UNION

19-21 September 1997, Iowa City

Spring 1998, Ames

Fall 1998, Des Moines

FIELD REPORTS

Anyone observing birds in Iowa is encouraged to report their findings on a quarterly basis to the Field Reports editors. Sample reporting and documentation forms suitable for duplication are available from the editor (send self-addressed stamped envelope to Jim Dinsmore, 4024 Arkansas Dr., Ames, IA 50014). An article describing the reporting process is also available.

Deadlines for receipt of field reports are as follows:

- *Winter (Dec, Jan, Feb)--3 March (Robert Cecil, 1315 41st St., Des Moines, IA 50311)
- *Spring (Mar, Apr, May)--3 June (Thomas H. Kent, 211 Richards St., Iowa City, IA 52246)
- *Summer (Jun, Jul)--3 August (James J. Dinsmore, 4024 Arkansas Dr., Ames, IA 50014)
- *Fall (Aug, Sep, Oct, Nov)--3 December (Thomas H. Kent, 211 Richards St., Iowa City, IA 52246)

CHRISTMAS BIRD COUNT

*Deadline for receipt of reports: 15 January. For forms and instructions write: Stephen J. Dinsmore, 4024 Arkansas Dr., Ames, IA 50014.

IOWA BIRDLINE 319-338-9881

The birdline is a recorded summary of interesting recent bird sightings in Iowa. At the end of the report you can leave a message and report recent sightings. Be sure to give your name and phone number as well as the location of the bird and date seen. Call in as soon as possible after sighting a rare bird. Jim Fuller checks the reports daily and updates the recording on Monday, so make sure Sunday sightings are reported by Sunday night.

I.O.U. HOMEPAGE: <http://storm.simpson.edu/~birding/>

I.O.U. NEWS

Send items of interest for the newsletter to the editors (J. Hank and Linda Zaletel, 1928 6th St., Nevada, IA 50201).

MATERIALS AVAILABLE

The following materials may be obtained by writing the editorial office (Iowa Bird Life, 4024 Arkansas Dr., Ames, IA 50014):

- *Order form for back issues of *Iowa Bird Life*: send self-addressed stamped envelope.
- *Field Checklist of Iowa Birds--1996 Edition: 25 for \$8.00, postpaid. Also available at annual meetings.

REPORTING NEBRASKA BIRDS

Sightings of Nebraska birds, including those within the Nebraska portion of DeSoto N.W.R., should be reported to Loren and Babs Padelford, 1405 Little John Road, Bellevue, NE 68005. Formats for reporting and documentation are the same as for Iowa. The Nebraska Bird Line, available 24 hours a day, is 402-292-5325. Iowa birders are encouraged to report their Nebraska sightings to this number.

ADDRESS CHANGES

Please send address changes/corrections to Jim Scheib, 10 Longview Knoll, Iowa City, IA 52240

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